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GREASE-LUBRICATED Timken® bearings on passenger cars and diesels go from one wheel-turning to the next without attention! It's been proved by three leading railroads who've made the switch from oil to grease-lubricated Timken bearings! One railroad ran grease-lubricated Timken bearings over 200,000 miles without adding any lubricant at all! Result: man-hours previously needed for frequent checking and addition of lubricant between wheel-turnings are eliminated. And there are big savings on lubricant, too!

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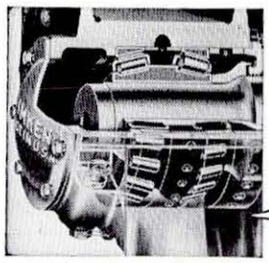
TAPERED ROLLER BEARINGS



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NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▱ BEARING TAKES RADIAL ↕ AND THRUST →○← LOADS OR ANY COMBINATION ✳

For your remaining steam locomotives . . .

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COMPLETE TREATMENT IN BALL FORM
DIRECT TENDER APPLICATION

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Feeding Equipment
Weighing or Mixing

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2 Prevents Boiler Scale

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4 Ends Pitting and Corrosion

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5 Keeps Feedlines, Injectors Clean

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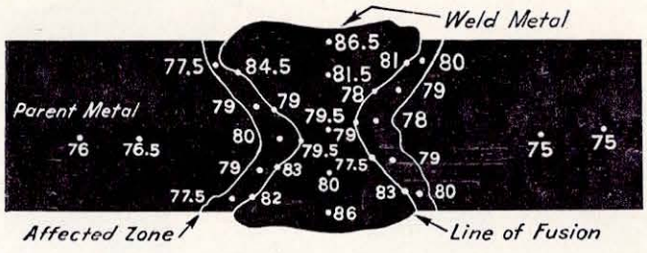

Rockwell B hardness on ½-in. manual arc-welded plate of Mayari R, stress-relieved at 1050 deg F.

Mayari R is a low-alloy, high-strength steel that can be welded by the ordinary methods used for plain carbon steel . . . electric-resistance, including spot-, seam-, and flash-butt . . . electric-arc, including metallic, carbon, and inert-arc . . . automatic-submerged-arc . . . and gas-welding processes.

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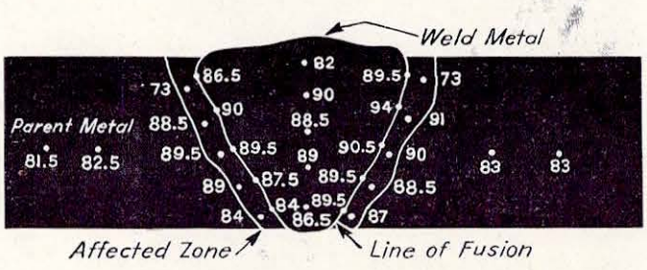

Rockwell B hardness on ¼-in. manual arc-welded Mayari R plate, as welded.

A non-air-hardening grade, Mayari R shows no appreciable hardening from welding temperatures. Results of tests made on welded Mayari R indicate that the welds are equally as strong as the parent metal.

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Westinghouse Air Brake Company

AIR BRAKE DIVISION

WILMERDING, PA.

Vol. 133, No. 16 October 20, 1952

RAILWAY AGE

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Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
Railway Engineering & Maintenance Cyclopedia American Builder
Marine Engineering & Shipping Review Marine Catalog & Directory
Books covering transportation and building

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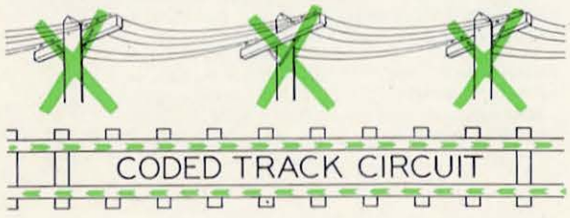

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DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

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NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, eight months	
1952	$6,810,999,610
1951	6,764,406,068
Operating expenses, eight months	
1952	$5,298,347,702
1951	5,345,357,749
Taxes, eight months	
1952	$ 782,437,887
1951	754,296,780
Net railway operating income, eight months	
1952	$ 611,327,838
1951	527,579,745
Net income, estimated, eight months	
1952	$ 405,000,000
1951	339,000,000
Average price railroad stocks	
October 14, 1952	62.96
October 16, 1951	57.00
Car loadings, revenue freight	
40 weeks, 1952	28,869,135
40 weeks, 1951	31,202,456
Average daily freight car surplus	
October 11, 1952	2,067
October 13, 1951	2,872
Average daily freight car shortage	
October 11, 1952	15,193
October 13, 1951	20,362
Freight cars delivered	
September 1952	3,762
September 1951	8,533
Freight cars on order	
October 1, 1952	95,377
October 1, 1951	140,135
Freight cars held for repairs	
September 1, 1952	108,222
September 1, 1951	96,020
Average number of railroad employees	
Mid-August 1952	1,219,257
Mid-August 1951	1,297,060

In This Issue . . .

EIGHT MONTHS FROM NOW—next June—Atlantic City, N. J., will play host to what may turn out to be one of the largest and most cosmopolitan gatherings ever held of railroad and railroad supply men—when the A.A.R.'s Mechanical and Purchases & Stores divisions and the Pan American Railway Congress all meet, and the Railway Supply Manufacturers' Association exhibits, at the same time and the same place. The mechanical division, forehandedly, has already announced its program; details will be found on page 11.

VITAL STATISTICS of the railroad industry—revenues, expenses, operating ratio, taxes and income of all Class I railroads, published just as soon as they become available—have been a regular feature of Railway Age *for many years. Such statistics, covering August and eight months of 1952, appear on pages 62, 63, 64 and 65.*

INCREASING ATTENTION is being paid by railroads, as by industry generally, to "human relations." How the Texas & New Orleans handles such relations in its Houston shops, and some of the striking results it has obtained, are fully outlined in a page 37 feature article.

TWO MORE RECENT CONVENTION REPORTS appear herein—the American Short Line railroad Association on page 44, and the National Association of Shippers Advisory Boards on page 51.

In Washington . . .

LATEST DEVELOPMENT in the complicated Long Island reorganization case was the October 15 filing with the I.C.C., by the Pennsylvania, of a "complaint" asking the federal regulatory body to order the LI to increase its commutation fares to cover costs of providing such service. Details of the complaint, and the reasons behind it, are set forth in the news pages.

THE FINAL REPORT on the exhaustive tests of truck-caused highway damage, which were conducted in Maryland a year or so ago, has just been released. As our news story on the subject indicates, it bears out essential features of the preliminary report made public last spring.

WEEK AT A GLANCE

EDWARD F. LACEY, executive secretary of the National Industrial Traffic League for the past 16 years, has announced his intention to retire from that position at the close of the League's coming annual meeting, in the course of which he will be guest of honor at a special testimonial dinner. A biographical sketch of Mr. Lacey's long career, devoted entirely to traffic work, appears in the news columns of this issue.

. . . And Elsewhere

FIRST BUSINESS IN THE COUNTRY to investigate the merits of a new type of paper which permits writing multiple copies without carbon paper are the railroads, it was revealed at the annual session of the American Association of Passenger Traffic Officers, in San Antonio, October 13-15. Utilizing the same pressure type of inscription as the familiar child's "magic slate," the new paper would eliminate the carbon problem in the new book type tickets. Not yet on the market commercially, nor the name of its manufacturer yet released, the product may have a wide application for other railroad forms requiring multiple copies. Harry Sengstacken, passenger traffic manager of the Milwaukee, showed fellow officers a sample of the new paper made up into a test facsimile of one of his road's new book-type interline tickets.

"WHEN ARE YOU GOING TO PUT ON ANOTHER PASSENGER TRAIN?" is what President Dumaine of the New Haven asks his top passenger or traffic officers at almost weekly intervals, C. E. Williams, general passenger traffic manager, told the members at the same meeting. "Our president," he declared, "insists on running more passenger trains." In reviewing the latest tour de force of the road in adding 50 new trains to its new fall schedules, Mr. Williams gave full recognition to the fact that the New Haven is in a "different" situation than most roads.

"WHILE WE WERE WAITING 18 MONTHS for our adjustment, the president of one of the large automobile companies told the president of one of our large railroads that he was very much dissatisfied with the slowness of action in O.P.S., since it had actually taken that agency 17 days to decide on an increase on a particular type of automobile. I am sure none of you industrial customers of ours would like to wait 18 months for price relief."—*From an address to the New England Shippers Advisory Board on September 18, by Curtis M. Hutchins, president of the Bangor & Aroostook.*

THE IMPORTANCE OF GETTING OUT THE VOTE is on the minds of many railroads throughout the country as the November election date draws near. Using a wide variety of different methods and approaches, individual railroads are working to stimulate employee interest in going to the polls to vote for "the candidates you believe best qualified."

NEW EMPLOYEES of the Elgin, Joliet & Eastern are being given a pocket-size illustrated booklet entitled "What's What on the 'J'." Opening with a word of welcome from President T. D. Beven, the book offers a 46-page orientation course about the railroad, so that the new employee may immediately see where he fits into the picture. There is a complete list of directors and officers—including agents at key points. There is a description of the location, duties and function of each department. And there is a complete run-down of employment information, including railroad retirement, insurance plans, safety program, pass regulations, labor organizations, credit unions, vacations, service recognition, employee activities, training programs, etc. —facts which the new employee might otherwise obtain only upon lengthy questioning of his superiors. Basic facts about the railroad—with a two-color map of the system and its connections—are also included. A liberal sprinkling of humorous cartoons and a number of photographs give the booklet a light-hearted "topping."

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advertising helped sell rail travel to
60,000,000
motorists last year

Did your road do its part and get its share by promoting the Hertz Rail-Auto Plan?

A recent survey indicates that *Hertz customers* ride 500 million miles on the railroads of America *before* they rent cars from Hertz! This is conclusive proof that the powerful Hertz advertising campaign in Saturday Evening Post, Life, Collier's, Holiday, National Geographic, Time, Newsweek, U. S. News & World Report and other publications is steadily creating many new customers for railroads. People like the convenience and comfort of riding trains, then having a new car to drive as their own when they reach their destinations.

Hertz, world's largest auto rental organization, serves the traveling public in more than 700 stations in more than 500 cities throughout the United States, Canada, Great Britain, Mexico, Hawaii, Alaska and Switzerland. Hertz created and developed the Hertz Rail-Auto Plan, to provide travelers with new cars at low rates, with gas, oil and proper insurance furnished. If you are not getting *your* share of this enormous, rapidly growing new market . . . by promoting the HERTZ RAIL-AUTO PLAN through your employees—in your publication advertising, timetables, folders, etc., it will pay you to do so at once. For complete details, write Hertz Driv-Ur-Self System, Inc., Dept. D10, 218 South Wabash Avenue, Chicago 4, Illinois. For your own profit, write today!

RAIL CREDIT CARDS—are honored at all Hertz stations. They serve as identification, eliminate deposit requirements, and provide credit privileges if desired.

Dept. D10, 218 South Wabash Ave., Chicago 4, Illinois **HERTZ** *Driv-Ur-Self* **SYSTEM**

BLT '32 ...rides better than new

...on ASF

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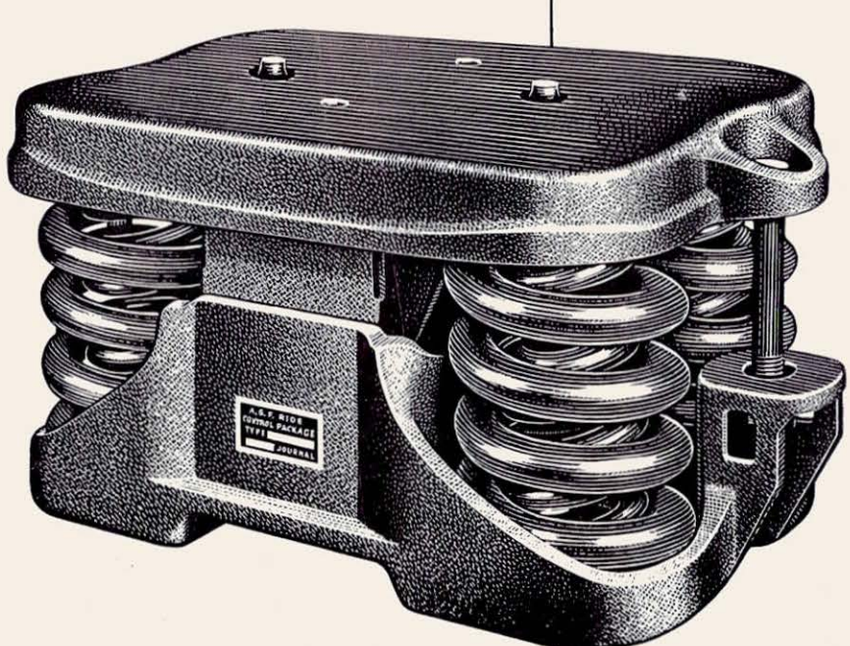
Carbuilders have big backlogs. You have to wait for new freight cars. But you *don't* have to wait to make *old* cars new . . . with the ASF Ride-Control Package.

The Package gives 2½ to 3 inches of spring travel, instead of 1 9/16 or 1 5/8 inches—the old AAR standard. The friction principle that has made the Ride-Control *Truck* the most *copied* in America is wrapped right into the Package—built-in, flame-hardened friction surfaces and all!

Easy to install, and economical to buy, too. And that's just the *start* of economy, for the soft, smooth Package ride protects lading, cuts claims, and reduces maintenance costs on rolling stock and roadbed.

Let's repeat—you can enjoy these benefits *now*. Why not ask the ASF representative about them. Or write for bulletins.



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Mechanical Division Announces A Five-Day Atlantic City Program

The 1953 annual meeting of the Mechanical Division of the Association of American Railroads will be held June 22-26, inclusive, at Atlantic City, N.J., where the Pan American Railway Congress will also be in session from June 21 to 25 (its earlier sessions, June 12-19, being scheduled at Washington, D.C.). The A.A.R.'s Purchases and Stores Division will also hold sessions on June 22-26 and there will be an A.A.R. member road meeting during the week. For the benefit of those attending all these meetings there will be an exhibit under the auspices of the Railway Supply Manufacturers' Association.

The meeting will open on Monday, June 22, at 9:30 a.m., Daylight Saving Time, with a joint session of the Mechanical and Purchases and Stores Divisions. No afternoon sessions are scheduled. C. W. F. Coffin, president of the Railway Supply Manufacturers' Association, will call the meeting to order. Following addresses by Mayor Joseph Altman of Atlantic City and William T. Faricy, president, A.A.R., the Mechanical Division will convene in Meeting Room "B." H. T. Cover, assistant vice-president (operating) and chief of motive power, Pennsylvania Railroad, will preside. The division will then proceed with the following program.

MONDAY, JUNE 22

Address by J. M. Symes, executive vice-president, Pennsylvania.

Address by J. H. Aydelott, vice-president, Operations and Maintenance Department, A.A.R.
Address by Chairman H. T. Cover.
Action on minutes of 1952 meeting.
Appointment of committees on subjects, resolutions, etc.
Unfinished business.
New business.
Report of General Committee.
Report of Nominating Committee.

TUESDAY, JUNE 23
9 a.m.

Address by W. J. Patterson, member, Interstate Commerce Commission.
Discussion of reports on:
- Arbitration.
- Prices for Labor and Materials.
- Loading Rules.
- Forest Products Loading.
- Tank Cars.
- Geared Hand Brakes.

WEDNESDAY, JUNE 24
9 a.m.

Address by William White, president, New York Central System.
Discussion of reports on:
- Car Construction.
- Passenger Car Specifications.
- Brakes and Brake Equipment.
- Couplers and Draft Gears.

THURSDAY, JUNE 25
9 a.m.

Address by V. N. Dawson, general store keeper, Baltimore & Ohio.
Distribution and collection of ballots for members of General and Nominating Committees.
Discussion of reports on:
- Specifications for materials.
- Safety Appliances.
- Wheels.
- Lubrication of Cars and Locomotives.

FRIDAY, JUNE 26
9 a.m.

Discussion of reports on:
- Axle and Crank-Pin Research.
- Locomotive Construction:
  - Steam and Electric Section.
  - Diesel Section.
  - Gas-Turbine Locomotive Section.

Report of tellers.
Report of Committee on Resolutions.

SATURDAY, JUNE 27

Inspection of exhibits.

PRR Asks Increase in Island Commuter Fares

Interstate Commerce Commission action "to raise commuting fares on the Long Island to cover the costs of providing its commuting services" is sought in a complaint filed with the I.C.C. by the Pennsylvania on October 15.

The complaint, which names William Wyer, trustee of the LI, as defendant, was filed by the PRR as principal owner and creditor of the LI. It alleges that the latter's "intrastate commutation fares fail to produce sufficient revenue to cover the cost of providing the service . . . including a reasonable return on the value of the property devoted to such service"; that such fares "constitute a drain and a burden upon the freight business of the Long Island . . . and upon the revenues of complainant"; and that they "cause undue, unreasonable and unjust discrimination against interstate commerce. . ."

No Specific Increase

The complaint seeks no specific fare increase, but asks the federal commission, "after due hearing and investigation," to order the LI to "apply to the future transportation of commutation passengers . . . in lieu of fares now in effect, such fares as the commission may deem necessary to remove said undue and unreasonable prejudice, preference and discrimination. . ."

In a statement issued to the New York press concurrently with the filing of the complaint, PRR President Walter S. Franklin stated that "fare increases are not the sole solution to the problems that beset" the LI, but that they are proposed "as a needed and desirable first step toward reorganizin" that company "as a self-supporting private enterprise." He summarized the reasons behind the request as:

"1. Revenue increases resulting from increased fares would go a long way toward enabling the LI to become financially sound and render improved service. . . . No appreciable diversion should be expected.

"2. The full costs of operating the LI must be paid whatever type of ownership or management is provided. This reality remains as a simple fact. . . . That public operation is more expensive than private, has been recently recognized . . in a report on another railroad in the New York area [Staten Island Rapid Transit] part of which is about to be forced into public ownership . . .

"3. The LI must continue to operate. . . . All other forms of transportation put together cannot serve even one-half of its passengers. . . .

"4. There is no road back from the perils of public ownership. Once socialized, no transit system has ever been restored to private management. . . ."

"The issue," Mr. Franklin also said, "between the advocates of public and private ownership for the LI now has been clearly drawn" by the plan of reorganization proposed by the Long Island Transit Authority. "It assumes that any private ownership must try to exist in the future under the same policies of rate-starvation imposed by the New York Public Service Commission from 1918 to 1947, and the same type of oppressive municipal taxation as now exists."

The complaint does not involve one-way or round-trip fares, nor does the naming of Mr. Wyer as defendant imply, Mr. Franklin emphasized, any criticism of his operation of the LI.

N.I.T. League's Lacey Will Retire Next Month

Edward F. Lacey, executive secretary of the National Industrial Traffic League since November 1935, will retire from that position next month after more than 36 years of service with the league.

Mr. Lacey, who is retiring at his own request, came to the league as assistant secretary in January 1916, after having been in the service of the Chicago, Burlington & Quincy and the Chicago Association of Commerce. During the period of his executive secretaryship, in which capacity he was the league's administrative officer, the organization has trebled its membership.

Mr. Lacey was born April 3, 1885, on a farm near Downers Grove, Ill., and was graduated from high school and business school in that town. His service with the Burlington was as clerk and stenographer in its general office at Chicago, where he was employed from June 1, 1906, until January 15, 1913. On the latter date he became secretary and assistant to the late Henry C. Barlow, director of traffic of the Chicago Association of Commerce, and remained in that position until he accepted the assistant secretaryship of the league, as noted above. In November 1936, about a year after Mr. Lacey became executive secretary, the executive office of the league was transferred from Chicago to Washington, D.C., where it has since remained.

Mr. Lacey was active in civic and business organizations in Chicago and Downers Grove, and he continued those activities in Washington. Such organizations include the Chicago Traffic Club; Traffic Club of Washington; Associated Traffic Clubs of America; Association of Interstate Commerce Commission Practitioners; American Society of Traffic and Transportation; Washington Board of Trade; and Rotary Club. He was also an honorary member of the Institute of Traffic Administration of London, England.

His committee memberships have included the executive committee of the Atlantic States Shippers Advisory Board; American University's advisory committee on transportation studies; the Defense Transport Administration's transportation advisory committee; and the Department of Commerce's Transportation Council, of which he is secretary. Mr. Lacey will remain on the council and continue to serve as its secretary.

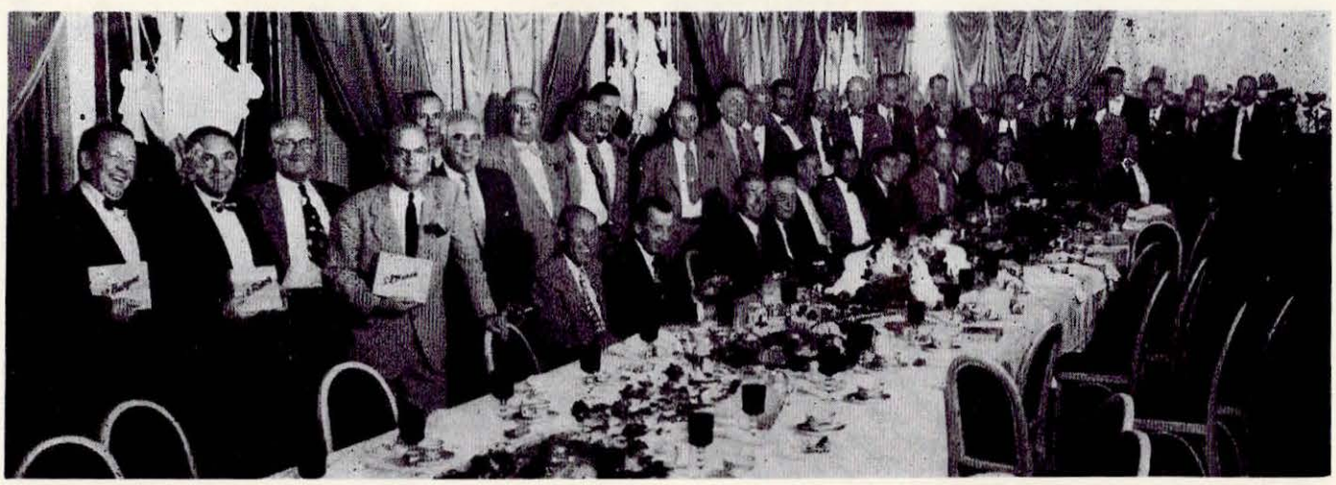
Over the years, Mr. Lacey has addressed many traffic and transportation groups and has written articles for traffic and transportation publications. He has been a member of the I.C.C. bar since it was established in 1929, being a Class B practitioner.

Mr. Lacey's retirement will become effective November 21, with the close of the league's 45th annual meeting, which will be held November 20-21 in New York at the Hotel Statler. He will be guest of honor at a testimonial dinner at New York's Biltmore Hotel on the evening of November 20.

A picture of Mr. Lacey appears on page 8.

New L&D Prevention Bureau Suggested

"Transportation and Packing Survey," an 88-page copyrighted report resulting from a joint inquiry by the railroads of the United States and the Fibre Box Association into causes of loss and damage recommends that the railroads set up a new bureau which would locate and work with companies whose products are damaged excessively during rail shipment. This recommendation followed a three-year study in which 3,440 carloads of products from



J. A. FISHER (second from left), president of the Reading, together with other officers of that company, was on hand to greet a group of interested officers from nearby eastern railways during their recent inspection of 275,000 sq. ft. of a new type of laminated oak flooring installed during renovation of one of the Reading's piers in Philadelphia. Following the inspection the railroaders were guests of the BakerWood Preserving Company and the Pittsburgh Screw & Bolt Corp. at a dinner at which D. B. Frampton was master of ceremonies.

more than 1,000 different manufacturers were inspected to determine the amount —and cause—of damage. It was found that less than 10 per cent of the cars suffered more than 60 per cent of the damage, as expressed in dollars.

The three most prominent causes of damage found were rough handling of cars by railroads, which was responsible for 27 per cent of all damage; poor arrangement of loads by shippers, which caused 18.6 per cent of the damage; and loose loading of boxes in cars, which produced 15.8 per cent of the claims.

For the railroads, the survey was directed by the chairmen of the three classification committees, with L. W. North, a member of the Official Classification Committee, acting for them. A. W. Luhrs, executive manager of the Fibre Box Association, represented his group in directing the survey.

R.E.A. Officers Attend Five-Day Conference.

Officers of the Railway Express Agency met in New York October 13-17 to participate in a management conference reviewing and studying express operations to discover improved procedures for stepping up service to higher speeds. The conference, A. L. Hammell, R.E.A. president, said, is part of the agency's program to maintain a highly efficient and fast delivery service to meet today's competitive conditions in transportation.

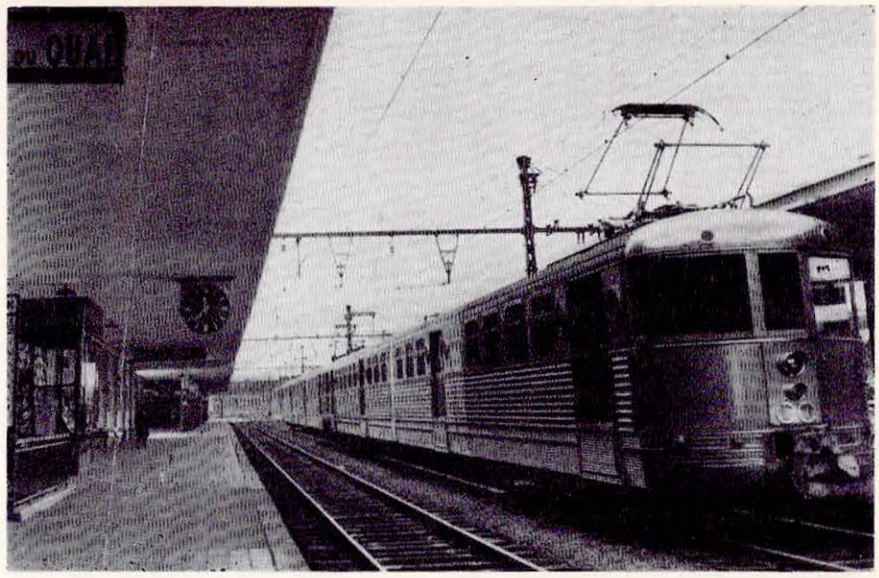
Erie Diesel Shop Has "Open House"

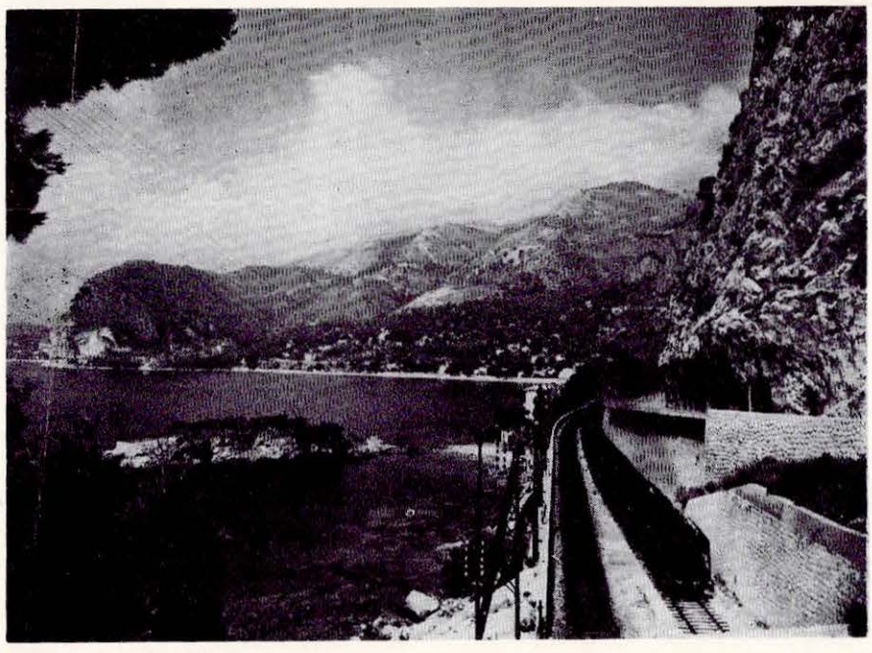
Employees of the Erie's diesel shop at Hornell, N.Y., were hosts to residents of the surrounding area at an "open house" on October 15. Regular operations were continued throughout the day as visitors saw how diesels are serviced when brought in for maintenance and repairs. The guests toured the plant in groups with an employee as guide or walked through by themselves to inspect the facilities and operations. Souvenirs and refreshments were distributed. Free bus service from Hornell's downtown district to the shop was provided.

New Coast-to-Coast Bus Line In Prospect

The Transcontinental Bus System of Dallas, Tex., has applied to the Interstate Commerce Commission for authority to acquire control of American Buslines. The latter carrier holds operating authority from coast-to-coast, while Transcontinental operates generally in the Southwest and West.

Transcontinental stockholders already have approved issuance of 10,413 shares of new preferred stock and 182,225 shares of new common. This would be exchanged for outstanding American stock on the following basis: Preferred, one-for-one; common, 1¼ shares of Transcontinental for each share of American.





FRENCH RAILROADS—almost completely destroyed in World War II—have staged a remarkable comeback. As of September 1944, 2,600 bridges, 70 tunnels, 82 per cent of the locomotives, 80 per cent of the passenger cars, and 64 per cent of the freight cars had been destroyed. Yet rehabilitation of track and structures, signals and rolling stock has been so complete that French trains are now said to cover 12,500 daily miles at more than 62 m.p.h. and another 19,000 daily miles at over 56 m.p.h. with an on-time record of 96 per cent for express trains and 99 per cent for suburban trains, plus an outstanding safety performance. Above is one of France's postwar electric trains; below, track along the French Riviera.

Asian Railway Officers To Visit United States

Sixteen top ranking railway officers from Southeast Asia and the Far East will be in North America from November 24 to December 24, in the course of a four-month round-the-world study trip designed to give them first-hand knowledge of modern railway methods and equipment used in industrially developed countries. The trip has been organized jointly by the United Nations Economic Commission for Asia and the Far East and the U.N.'s Technical Assistance Administration.

The group will study principally signaling equipment and operations; telecommunications, including use of radio in trains, installation of loudspeakers in railway stations and yards, teleprinters, etc.; and modern methods in operation of classification yards and terminals, with the principal objective of determining how the predominantly

single-track Asian railways can increase their traffic capacity through modern signaling and communications.

Of the 15 railway men making the tour, eight are traffic experts and seven signaling experts. Two each are from Pakistan, Burma, China, Indonesia, the Philippines and Thailand, three from India, and one from Viet-Nam.

I.C.C. Ends Trucking Business of C&O Employee

A machinist employed by the Chesapeake & Ohio must get out of the trucking business which he has been conducting on his off-days and after working hours. The Interstate Commerce Commission has ruled in a 5-to-4 decision, that public convenience and necessity do not require the operation.

The decision reversed a previous report by the commission's Division 5, which had been favorable to the part-time trucker. The trucking involved was the hauling of coal from mines in Greenbrier County, W. Va., directly to consumers in Alleghany County, Va. The C&O was among those who made presentations to the effect that no need existed for the trucking service. The case was docketed as No. MC-112285, J. W. Golden, Jr., Common Carrier Application.

A.A.R. Would Add Load Levy on Big Flats

The Association of American Railroads has submitted, to subscribers to the per diem and demurrage rules, the question of whether a so-called loading charge of $50 per car shall be paid, in addition to regular per diem charges, for use in loaded movement of railroad owned flat cars of the "heavy-duty" and other special types.

The question was submitted by letter ballot, the returns being due by noon October 31. The cars involved would be those of mechanical designation "FD," "FC," or "FW," and cars of designation "FM" having nominal capacity of 151,000 lb. and over. The $50 charge paid to the car owner in addition to the per diem rental, would be prorated among roads enjoying the loaded haul on the same basis as the freight revenue applicable to the load.

By another letter ballot, also returnable by noon October 31, the A.A.R. has submitted to the same voters the question of whether the demurrage strike rate shall at all times equal the per diem rate plus 25 cents. The present demurrage strike rate equals the per diem rate of $2, so a favorable vote on the proposal would immediately increase the former rate to $2.25.

D.T.A. Issues Another Report on Warehousing

The Defense Transport Administration has published further results of its recent survey of the public warehousing industry by issuing a report concerning the availability of public space for storage of baled cotton.

The report supplements "The Storage Picture" published by the D.T.A. on September 22, which furnished data concerning the general merchandise and household goods warehousing industry.

New Georgia Docks To Be Dedicated on November 11

Georgia's new $6,000,000 Savannah state docks, operated by the Georgia Ports Authority, are to be officially dedicated at all-day ceremonies on November 11. They will be served by more than 13 miles of spur track on the property, as well as by modern shipside railroad loading facilities. More than 500 railroad cars can be parked on the authority property, which is served by the Atlantic Coast Line, the Central of Georgia, the Savannah & Atlanta, the Seaboard Air Line and the Southern.

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended October 11 were announced by the Association of American Railroads on October 16 as follows:

	Surplus	*Shortage*
Plain Box	29	8,419
Auto Box	16	112
Total Box	45	8,531
Gondola	244	3,848
Hopper	5	2,009
Covered Hopper	0	236
Stock	92	297
Flat	15	256
Refrigerator	981	10
Other	685	6
Total	2,067	15,193

Aitchison Opens Washington Office

Clyde B. Aitchison, former member of the Interstate Commerce Commission, has opened an office at 1737 H street, N.W., Washington, D.C., where he will engage in the practice of law. Mr. Aitchison's plans to do this were indicated when he retired in July from the commission membership he had held for 35 years.

He announced at that time that he would become a practitioner before the commission, and that he had received a certificate of practice. (*Railway Age*, July 28, page 15.)

Transportation Assn. to Hold Open Round Table

All phases of the first report of the Transportation Association of America's Cooperative Project on National Transportation Policy (*Railway Age*, June 2, 1952, page 95) will be the subject of open round table discussions to be held in Chicago on November 24 and 25. The purpose of these discussions is to give all interested parties an opportunity to present their views on the subject of the report. Following the discussions, the association's board of directors will determine its policies and procedures with reference to submitting the report to Congress.

The association is inviting anyone interested in appearing at the discussion to notify the committee at 130 North Wells Street, Chicago 6, on or before November 1, stating which subjects he wishes to discuss. Oral presentations will be limited to 10 minutes, but written statements of position may be filed in advance of the meeting.

FINAL ROAD-TEST REPORT SHOWS TRUCK DAMAGE

The Highway Research Board has issued a final report on the road test which it conducted near La Plata, Md., in the summer and fall of 1950. The report concludes that heavily loaded trucks can cause serious damage to a paved highway.

Findings in the report were first made public, in preliminary form, last May (*Railway Age*, May 19, page 11).

Principal purpose of the Maryland test was to determine the relative effects of four different axle loads on concrete pavement. The test was sponsored by highway departments of 11 states and the District of Columbia.

Loads employed in the test were 18,000 lb. and 22,400 lb. on single axles, and 32,000 lb. and 44,800 lb. on tandem axles. With trucks running constantly over separate sections of highway, it was possible to measure the relative damage caused by the different weights. The test runs began in June 1950, and on October 13 it was necessary to halt the 44,800-lb. test trucks because that section of the highway was cracking at the rate of approximately 100 ft. per day.

The report showed that average cracking of pavement increases in the order of the 18,000-lb. single axle, the 32,000-lb. tandem axles, the 22,400-lb. single axle and the 44,800-lb. tandem axles.

A soil identified as "A-6" (silty clay) formed the principal subgrade material under the test road. While the report classified this soil as "poor" and called it "susceptible to pumping," it was also stated that this type soil "is typical of the soils underlying an extensive mileage of concrete pavement in this country."

Freight Car Loadings

Loadings of revenue freight in the week ended October 11 totaled 842,713 cars, the Association of American Railroads announced on October 16. This was a decrease of 9,153 cars, or 1.1 per cent, compared with the previous week; a decrease of 25,970 cars, or 3 per cent, compared with the corresponding week last year; and a decrease of 46,176 cars, or 5.2 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended October 4 totaled 851,866 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, October 4

District	1952	1951	1950
Eastern	140,152	143,373	145,949
Allegheny	166,711	171,166	174,796
Pocahontas	54,772	67,062	64,657
Southern	133,350	135,185	137,070
Northwestern	152,942	140,439	141,159
Central Western	134,837	135,369	135,512
Southwestern	69,102	66,163	64,760
Total Western Districts	356,881	341,971	341,431
Total All Roads	851,866	858,757	863,903
Commodities:			
Grain and grain products	52,998	54,192	51,200
Livestock	15,238	17,828	15,737
Coal	135,935	159,679	164,048
Coke	14,843	15,814	14,853
Forest products	45,892	46,100	48,488
Ore	95,306	81,101	76,686
Merchandise l.c.l.	75,520	76,504	88,600
Miscellaneous	416,134	407,539	404,291
October 4	851,866	858,757	863,903
September 27	862,061	864,575	880,186
September 20	873,559	863,690	870,529
September 13	881,218	850,812	866,658
September 6	746,044	732,769	751,449
Cumulative total 40 weeks	28,869,135	31,202,456	29,362,762

In Canada.—Carloadings for the nine-day period ended September 30 totaled 117,296 cars, compared with 84,393* cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
September 30, 1952	117,296	51,568
Cumulative totals		
September 30, 1952	3,092,211	1,328,900

*Revised

Waybill Study

Another waybill study has been issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. It is Statement No. 5234, State-to-State Distribution of Traffic and Revenue in the Manufacturers and Miscellaneous and Forwarder Traffic Groups—Terminations in 1951.

I.C.C. Hears Re-Argument Of Ogden Gateway Case

Re-argument of the so-called Ogden gateway case began last Wednesday before the Interstate Commerce Commission. This re-argument of the three-year-old proceeding was scheduled so that Commissioners Arpaia and Elliott, new members of the I.C.C., could participate in the case.

The proceeding is docketed as No. 30297. It involves a complaint by the Denver & Rio Grande Western, asking the I.C.C. to require the Union Pacific to participate in joint through rates via the Ogden, Utah, gateway.

Oral argument in the case was first heard by the commission in October of last year. Prior to that, in November 1950, the commission received a report from its chief examiner, Frank E. Mullen, recommending that the Ogden gateway be forced open. (*Railway Age*, November 25, 1950, page 50). The D&RGW complaint was filed in the summer of 1949.

Free Passes on Railroads Up For Further Hearing

The Interstate Commerce Commission's investigation of unauthorized free transportation by railroads (Docket No. 30475) has been assigned for further hearing October 27 before Commissioner Mitchell at Chicago.

"At such hearing opportunity will be afforded for introduction of testimony on the following matters," a commission notice said.

"(1) By eastern railroads as to the subject matter of the investigation;

"(2) By interested parties on the question of whether a railroad employee holding seniority rights, but on leave and employed full time by a brotherhood, may legally receive free transportation, and

"(3) By interested parties on the question of whether an employee of a railroad (Ligonier Valley Rail Road Company) which recently has ceased operations pursuant to commission authorization, may lawfully receive free transportation."

This investigation into free transportation by railroads was instituted by the I.C.C. in February 1950. (*Railway Age*, February 25, 1950, page 55). Western railroads testified in the case at a March 1951 hearing at Chicago. (*Railway Age*, April 2, 1951, page 76).

I.C.C. Will Issue Reports On Motor Carrier Accidents

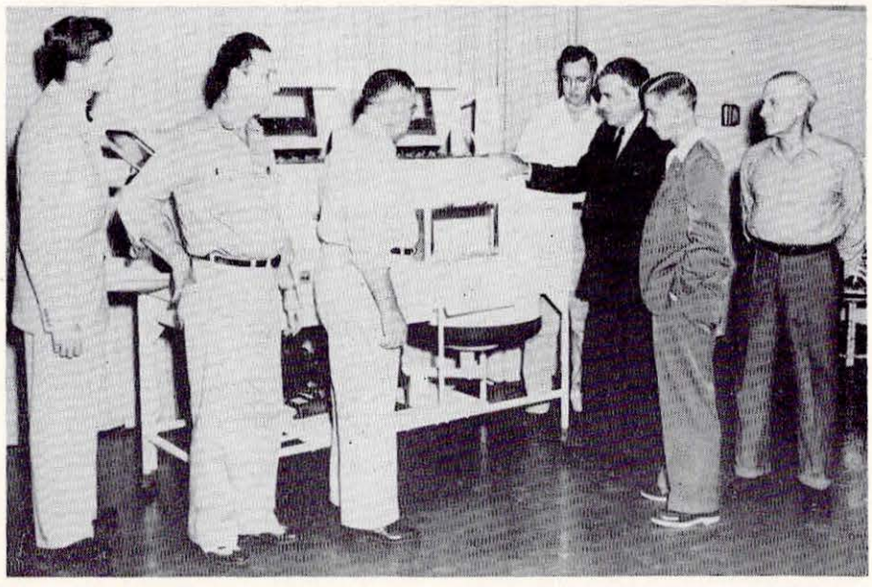
The Interstate Commerce Commission has voted to issue reports on its investigations of motor carrier accidents.

This was announced by Acting I.C.C. Secretary G. W. Laird in an October 14 notice. The announcement also said that authority to issue and release the reports (except those in which testimony is taken at a public hearing) has been delegated to Commissioner Arpaia.

I.C.C. Delegates More Power to Its Boards

Power to act initially in tariff-suspension and fourth-section matters has been delegated by the Interstate Commerce Commission to its Board of Suspension and Fourth Section Board. The delegations, which become effective December 1, were set out in an order dated October 7.

The order makes the commission's Division 2 an appellate division to which actions of the boards may be appealed. And there will be no further appeal available at the commission, the



ALUMINUM "IRON" LUNG, built by volunteer union labor of materials furnished by the Toledo, Peoria & Western, was recently presented to Peoria's St. Francis hospital. Believed to be the first aluminum lung in the country, it was redesigned from a wooden unit built during a recent emergency drive. Here J. Russel Coulter (in dark suit), president of the TP&W, examines the lung with representatives of the International Brotherhood of Electrical Workers, the Brotherhood of Railway Carmen, the International Brotherhood of Boilermakers, Iron Ship Builders & Helpers, the Sheet Metal Workers International Association, the International Association of Machinists and the International Brotherhood of Firemen, Oilers, Helpers, Roundhouse & Railway Shop Laborers—all of whom contributed their skills toward building the unit.

THE 11 MILES OF RAILROAD which still remain of the East Tennessee & Western North Carolina are doing an increasingly large carlot freight business in the booming synthetic textile city of Elizabethton, Tenn., as this new $25,000 extension to its freight office attests.

order having stipulated that Division 2's determinations "shall be administratively final and not subject to review by the commission." Meanwhile, the order excepts some matters from the delegation of power to the boards.

Along with the order, the commission issued an explanatory notice by its acting secretary, George W. Laird. "The purpose of this action," Mr. Laird said, "is in harmony with suggestions emanating from practitioners, from legislators, and from others in order to relieve members of the commission of as much detail as possible."

In order to qualify the boards for their broader roles, the commission has converted them into "boards of employees" under section 17 of the act. That section sets out specifications for employee boards to which th ecommission is authorized to delegate its work and functions.

The delegation to the Board of Suspension authorizes it to act initially on suspension matters except these: (1) Petitions or requests relating to tariffs or schedules filed in purported compliance with any decision or order of the commission or division thereof; (2) petitions or requests for suspension of proposed general increases in rates, fares, or charges for application throughout a rate territory or region, or of wider scope; (3) any action in connection with suspensions to be taken during or after formal hearings or investigations.

The delegation to the Fourth Section Board authorizes it to act initially on matters relating to the long-and-short-haul clause and the aggregate-of-intermediates provision—"except proceedings made the subject of formal hearing, matters prompted by an order or requirement of the commission or a division thereof, or matters arising from general increase proceedings."

The assignment provisions also stipulate that either board may certify to Division 2 any matter which, in the board's judgment, should be passed on by that division or the commission.

We Were Off 1½ Hours

Announcement of the new schedule of the Northern Pacific's "North Coast Limited" between Chicago and Seattle, appearing in *Railway Age* October 6, page 25, erroneously stated that the 46½-hour schedule will place that train "on a schedule par with the 'Empire Builder' of the Great Northern and the 'Olympian Hiawatha' of the Milwaukee, between the same termini." Actually, the latter two trains have 45-hour schedules between Chicago and Seattle.

I.C.C. Approves Modified Seattle-Portland Pool Plan

The three railroads which operate joint passenger train services between Seattle, Wash., and Portland, Ore., have cleared with the Interstate Commerce Commission a supplemental contract under which they will eliminate one pool train daily in each direction.

The railroads are the Northern Pacific, Great Northern and Union Pacific. The commission's order (by Division 3 in the No. 23455 proceeding) approved and authorized discontinuance of the trains "insofar as such approval and authorization are required" under the applicable pooling provisions, section 5(1), of the Interstate Commerce Act.

Mechanical Lubricators on Interchange Freight Cars

In two circular letters dated September 4, the Mechanical Division of the Association of American Railroads, announced advance approval of application of mechanical journal lubricators of both the Hennessey and Jeffers types to cars which move in interchange freight service, up to 1,000 car sets of each. The letters state that this does not constitute unlimited approval of these devices as now designed, but the action is taken so service performance data may be secured and properly evaluated,

(*Continued on page* 59)

ORGANIZATIONS

Railroad Enthusiasts, Inc., New York Division, will hold a regular monthly meeting in Room 5928, Grand Central Terminal, at 8 p.m., October 22. A. M. Bixby, vice-president of the Waugh Equipment Company, will speak on "Development in Rubber Draft Gears," illustrated with slides. Following the address two movies will be shown—"Railroads Speed the Freight" and the Chicago & North Western's "Song of the Pioneer."

The **Traffic Club of St. Louis** will hold its annual "Harvest Festival" costume dance at the Sheraton Hotel on October 30. Reservations are limited to 500 tickets, on a "first-come-first-served" basis.

The **Northwest Shippers Advisory Board** will hold its 102nd regular meeting at the Gardner Hotel in Fargo, N.D., on October 28 and 29. W. L. Countryman, Jr., vice-president and general counsel of the Northern Pacific, will be guest speaker at a joint luncheon with the **Fargo Rotary Club** on October 29. The L. C. L. and Freight Loss & Damage Prevention Committees will hold a joint meeting at 9:30 a.m. on October 28.

SUPPLY TRADE

E. D. Tull has been appointed to the newly created position of vice-president and general manager of the **Cummins Engine Company** at Columbus, Ind. He has been with the company since 1928 and in his new position will be responsible for coordinating the work of the five divisions of the company.

Marshall A. Williams has been appointed regional manager of the Government and Industrial Division of **Philco Corporation,** with headquarters in Beverly Hills, Cal.

The **Caterpillar Tractor Company** has announced plans for a new warehouse and processing plant to be constructed immediately adjacent to the company's new plant site at York, Pa. The one-story structure will cover about 300,000 sq. ft., with an adjacent 72,000-sq.-ft. concrete storage slab. This facility is designed to meet a growing need on the Atlantic seaboard and for export

traffic through Atlantic coast ports. A 600,000-sq.-ft. manufacturing plant, under construction on the 200-acre lot, is scheduled to start limited production about July 1953, and to be completed by the end of that year.

The **Pittsburgh Plate Glass Company** has opened a new paint manufacturing plant on a 14-acre tract at East Point, Ga.

OBITUARY

J. W. Motherwell, 79, formerly president and general manager of the Ashton Valve Company, died on September 2.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

3,762 Freight Cars Delivered in September

Continued shortages of car building materials caused by the steel strike last June and July cut the number of freight cars delivered in September for domestic use to 3,762, the lowest since July 1950, the American Railway Car Institute and the Association of American Railroads have announced jointly. Deliveries in September 1951 included 8,533 cars.

Orders were placed in September for 3,628 new freight cars, the announcement added, and the backlog of cars on order on October 1 totaled 95,377.

A breakdown by types of cars ordered and delivered in September, and of cars on order on October 1, appears in the accompanying table.

	Ordered Sept. '52	Delivered Sept. '52	On Order & Undelivered Oct. 1, '52
Box—Plain	50	1,151	25,347
Box—Auto	0	0	750
Flat	8	21	3,993
Gondola	432	740	21,897
Hopper	506	776	26,339
Covered Hopper	155	242	5,264
Refrigerator	1,000	456	4,095
Stock	0	89	411
Tank	1,477	261	6,624
Caboose	0	24	170
Other	0	2	487
TOTAL	3,628	3,762	95,377
Carbuilders	1,420	1,879	56,422
Railroad shops	2,208	1,883	38,955

The **Duluth, Missabe & Iron Range** has ordered 500 70-ton ore cars from the Pullman-Standard Car Manufacturing Company at an estimated cost of approximately $3,500,000.

The **Lehigh Valley** has ordered from the Bethlehem Steel Company 100 70-ton, 35-ft. 3-in. steel covered two-hopper cars. The cars, to be built at Bethlehem's Johnstown, Pa., plant, are scheduled for delivery in the spring of 1953.

The **Merchants Despatch Transportation Corporation** and the

TEE PEE WILLIE
for BETTER SHIPPING
"Thanks heap much for vote. Vote-um again with 'nother carload on T.P.&W."
TPW
TOLEDO, PEORIA & WESTERN RAILROAD

PASSING REPORTS go to Toledo, Peoria & Western shippers enclosed in this card of thanks from the road's mascot, "Tee Pee Willie."

Northern Refrigerator Line have jointly ordered 1,000 40-ton refrigerator cars, to be built in M.D.T. shops at a presently estimated cost of $9,548.92 each, subject to interim escalation. Delivery of these cars is scheduled to begin in September 1953 and to be completed in December of that year.

The **Missouri Pacific** has ordered two heavy capacity cars (one flat and one well car) from its DeSoto, Mo., shops.

The **Reading** has ordered one 245-ton flat car and one 125-ton flat car from its own shops. The larger car will cost $36,500 and the smaller $26,944.

The **Toledo, Peoria & Western** has ordered 50 50-ton box cars, the order being divided equally between the Pullman-Standard Car Manufacturing Company and the American Car & Foundry Co. Delivery of the cars, which will cost approximately $300,000, is expected during the first quarter of next year.

The **Union Tank Car Company** has ordered from its own shops 600 50-ton tank cars, to weigh 70,000 lb. each, for delivery during 1953.

LOCOMOTIVES

The **Canadian Pacific** has ordered 73 diesel units costing $15,000,000. Orders were placed as follows: General Motors Diesel, Ltd.—10 1,500-hp. "A" road units, four 1,500-hp "B" freight units, 14 1,500-hp. road-switchers and six 1,200-hp. switchers; Montreal Locomotive Works—two 1,600-hp. "A" road units, 10 1,600-hp. "A" freight units, two 1,600-hp. "B" road units, six 1,600-hp. "B" freight units, four 1,000-hp. switchers and five 660-hp. switchers; Canadian Locomotive Company — six 1,600-hp. "A" and four 1,600-hp. "B" freight units. Deliveries are scheduled for summer of 1953. To provide servicing facilities for these units, a new diesel shop is being built at Nelson, B.C.

The new motive power will completely dieselize passenger and freight operations on the road's Kettle Valley and Kootenay divisions in southern British Columbia.

The **Louisville & Nashville** has ordered 49 diesel units costing an estimated $7,300,000. The Electro-Motive Division of General Motors Corporation will build four 1,500-hp. "B" road freight units, 30 1,500-hp. general-purpose units and two 1,200-hp. switchers. The American Locomotive-General Electric Companies will construct two 1,600-hp. "A" road freight units, seven 1,600-hp. road-switchers and four 1,000-hp. switchers. Deliveries are expected to be completed by July 1, 1953.

PASSENGER CARS

Rectifier Type M.-U. Cars for the New Haven

The Westinghouse Electric Corporation will provide more than $5,000,000 worth of electrical equipment for 100 new commuter cars for the New York, New Haven & Hartford (*Railway Age*, August 25, page 16). The new multiple-unit cars, which will be built by the Pullman-Standard Car Manufacturing Company, will be used in service between New Haven, Conn., and Grand Central Terminal in New York City.

Equipment for each car will include four 100-hp. spring-suspended d.c. motors, main transformer, controls and four ignitron rectifier tubes to change alternating current from the trolley to direct current for the motors. All cars are motor cars and may be operated from either end.

Between New Haven and Woodlawn, N. Y., the cars will operate from 11,000-volt, single-phase, 25-cycle, a.c. overhead wire. From Woodlawn to Grand Central Terminal, they will operate on 600-volt d.c. power taken from a third rail.

SIGNALING

The **Baltimore & Ohio** has ordered equipment from the General Railway Signal Company for installation of a traffic control system between Dayton, Ohio, and Lima, 71.4 miles.

The **Canadian National** has ordered equipment from the General Railway Signal Company for installa-

tion of absolute-permissive block signaling between Kamloops Junction, B.C., and Ashcroft, 52 miles.

The **Canadian National** is to install centralized traffic control on 105 miles of single track, and automatic block signals on 35 miles of double track, between Atikokan, Ont., and Port Arthur, to speed up traffic, particularly grain and iron ore moving to lakehead. The contract for the work has been awarded to the General Railway Signal Company, to be completed in 1953.

The **Chesapeake & Ohio** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to install centralized traffic control on 55 miles of single track between Drew, Ind., and Peru. The new territory will be controlled from a 5-ft. addition to the existing style C machine, which controls the Cheviot-Drew installation, at Peru division headquarters. In addition to code equipment, the order includes styles R-2 and N-2 signals, M-23A dual-control electric switch machines, SL-21A electric switch locks, relays, rectifiers, switch circuit controllers, housing, etc. Field installation will be handled by railroad forces.

The **Louisville & Nashville** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to install centralized traffic control on 165 miles of single track between Corbin, Ky., and Etowah, Tenn. The 10-ft. style C control machine will be installed at Knoxville, Tenn. In addition to code equipment, the order includes styles H-2 searchlight signals, M-23A dual-control electric switch machines, T-21 switch stands, SL-25 electric switch locks, relays, rectifiers and housings. Field installation will be handled by railroad forces.

The **Southern Pacific** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to remotely control a new siding between Puente, Cal., and Marne, in the Alhambra-Colton C.T.C. territory. The order covers material to add controls to the existing machine at Beaumont, Cal., styles H-2 searchlight signals, M-23A dual-control electric switch machines, relays, rectifiers, transformers and housings. Field installation will be handled by railroad forces.

The **Southern Pacific** has ordered several railroad radio installations from Motorola, Inc., to radio-equip 155 miles of line from Sacramento, Cal., to Sparks, Nev., over the Sierra Nevada mountains through Donner Pass. Radio wayside stations are to be installed at Colfax, Cal., Emigrant Gap, Norden and Truckee. These stations may be selected and controlled by the Sacramento dispatcher as well as by the local operator. Every radio equipped train within this portion of the railroad will be within reach of the radio system. If wire communication lines in the territory should temporarily be lost, they may be supplanted by radio relay until restored to service.

CONSTRUCTION

CNR Awards First Kitimat Branch Contract

A contract for clearing and grading the right-of-way of the Canadian National's new branch in British Columbia from Terrace to Kitimat has been awarded to Campbell & Bennett, Ltd., of Vancouver. The contract, first to be awarded for construction on the project, also covers installation of culverts, timber bridges and concrete substructures for steel bridges, but not the large bridge which will cross the Skeena river. An illustrated feature story, with map, about the branch was published in *Railway Age*, July 7, page 130.

Chesapeake & Ohio.—This road is building a new 4½-mile spur track from its main line at Robbins, Ohio, to the site of the Atomic Energy Commission plant about 18 miles north of Portsmouth, at a cost of $1,300,000. Contractors are the L. L. Smith Construction Company, Huntington, W. Va., the L. S. Coleman Company, St. Albans, W. Va., and Haley, Chisholm & Morris, Charlottesville, Va. Some fills and cuts will be made but it will not be necessary to build any major structures. Plans call for completion of the project by December 1 or shortly thereafter.

FINANCIAL

Norfolk Southern.—*Stock Split.*—Division 4 of the I.C.C. has approved this road's two-for-one stock split (*Railway Age*, March 31, page 61). The road was authorized to issue 195,166 shares of no-par common, for distribution to present stockholders on the basis of one new share for each share held. This stock split is designed to broaden the market for NS stock and increase its marketability. The stock is traded "over the counter" and Division 4 noted that there is frequently a spread of several dollars between the "bid" and "asked" prices for the stock.

Toledo, Peoria & Western.—*Stock Split.*—This road has applied to the I.C.C. for authority to effect an 1,800-to-1 split in its present capital stock. (*Railway Age*, April 28, page 58). The road also asked authority to dissolve the existing Illinois corporation and reincorporate in Delaware. The latter state has a "modern and complete corporation code" and moving the corporation there would eliminate several legal problems which result from operation in Illinois.

The stock split would place the road's capitalization at $3,600,000. At present the road has only 50 shares of $100 par stock, and the market value of each share is around $75,000. With 90,000 shares of $40 par stock, the road said the number of stockholders would be increased, and the present use of fractional shares, which complicate corporate records, would be eliminated.

New Securities

Division 4 of the I.C.C. has **authorized:**

CHESAPEAKE & OHIO.—To assume liability for $5,250,000 of equipment trust certificates, to finance in part 27 diesel-electric locomotive units and 420 hopper cars costing an estimated $6,639,042. (*Railway Age*, September 22, page 68). Division 4 approved sale of the certificates for 100.4693 with interest at 3¼ per cent—the bid of Halsey, Stuart & Co. and 13 associates—which will make the average annual cost of the proceeds to the road approximately 3.17 per cent. The certificates, dated October 15, will mature in 30 semiannual installments of $175,000 each, beginning April 15, 1953.

They were reoffered to the public at prices yielding from 2.15 to 3.25 per cent, according to maturity.

PORT ANGELES WESTERN.—To issue, from time to time, up to $100,000 of trustee's certificates, proceeds from which will be used to meet current costs, and to pay off remaining indebtedness on the purchase price of the road. (*Railway Age*, September 22, page 68). The certificates, with interest at 4 per cent, will be sold to shippers and others interested in rehabilitation of the road.

Dividends Declared

CHESAPEAKE & OHIO.—75¢, quarterly, payable December 20 to holders of record December 1; preferred, 87½¢, quarterly, payable February 1, 1953, to holders of record January 8.

GEORGIA R R. & BANKING.—$1.75, quarterly, payable October 15 to holders of record October 1.

ONTARIO & QUEBEC.—$3, semiannual, payable in Canadian funds December 1 to holders of record November 1.

RUTLAND & WHITEHALL.—$1, quarterly, payable November 15 to holders of record November 1.

Security Price Averages

	Oct. 14	Prev. Week	Last Year
Average price of 20 representative railway stocks	62.96	62.64	57.00
Average price of 20 representative railway bonds	92.43	92.49	92.90

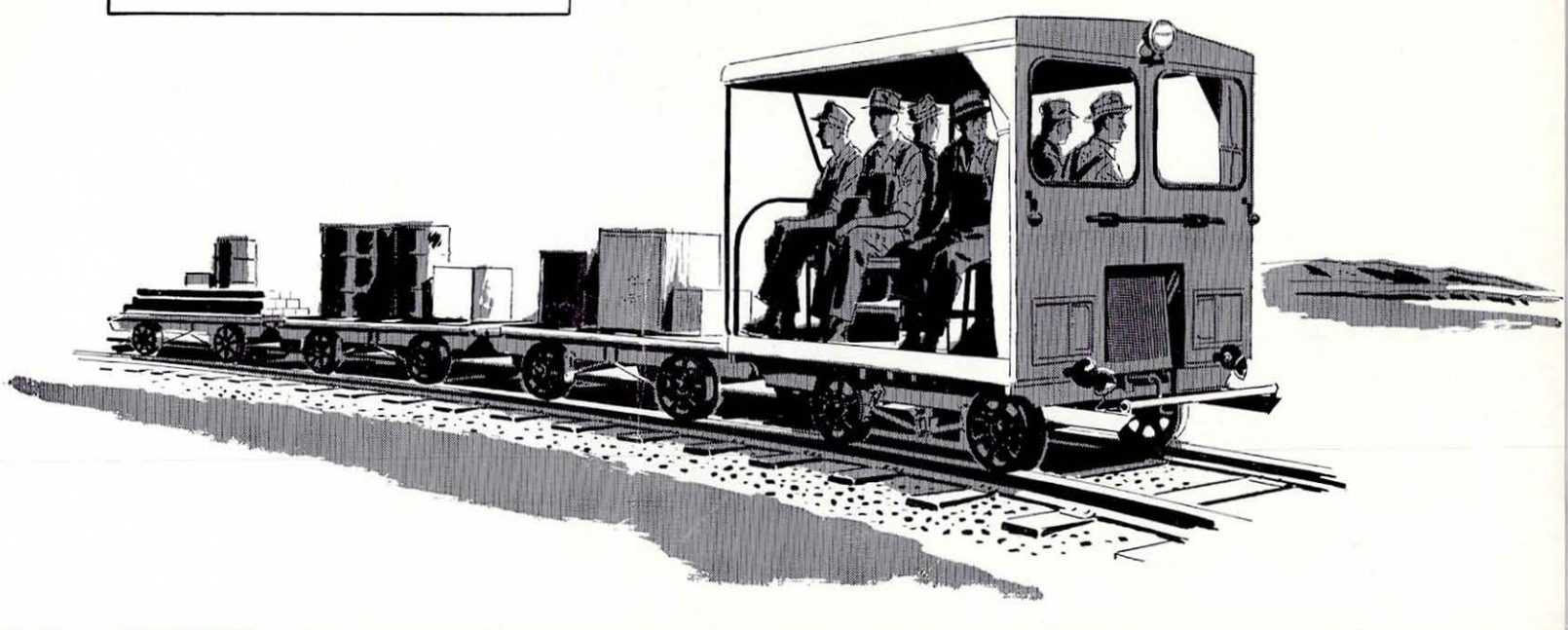
RAILWAY OFFICERS

EXECUTIVE

Richard N. Shields has been elected executive vice-president of the Pittsburgh & West Virginia at Pittsburgh, effective November 1. Mr. Shields has been general traffic manager of the Pittsburgh Steel Company since 1949 and president of the Monessen Southwestern Railway since 1950.

Bruce E. Dwinell, general solicitor of the Chicago, Rock Island & Pacific, has been appointed vice-president (*Continued on page* 56)

Fairmont RAILWAY MOTOR CARS AND WORK EQUIPMENT



Engineered–*to perform better*

Built–*to last longer!*

The statement above would apply equally well to any piece of railway equipment that bears the Fairmont name. For every Fairmont product is the very *last* word in engineering research . . . and the very *first* word in quality craftsmanship and construction. The Fairmont A3 Series D Gang Car, pictured above, is a dramatic example of this fact. Although designed expressly for B and B and extra gang service, for towing mowers, extinguisher cars and work trailers—it is also readily adaptable as a heavy-duty section car because of its unusually light weight. Its dependable 17 h.p. engine, four speed transmission and adjustable four wheel brakes make this one of the most versatile vehicles of its kind in the world. Evidence of its sound construction and in-built long life can be seen in its bolted steel frame, its sturdy axles, its strong, rugged body, and its many other special construction features. Wherever the A3 Series D Gang Car is used, it has proven itself to be a typical Fairmont achievement in every way—designed, engineered and built for *results on the job!*

FAIRMONT RAILWAY MOTORS, INC., FAIRMONT, MINNESOTA

Performance ON THE JOB COUNTS

MANUFACTURERS OF INSPECTION CARS, SECTION AND GANG CARS, HY-RAIL CARS, MOTOR CAR ENGINES, PUSH CARS AND TRAILERS, WHEELS, AXLES AND BEARINGS, MOWERS, BALLAST MAINTENANCE CARS, WEED BURNERS AND EXTINGUISHER CARS, DERRICK CARS, OIL SPRAY CARS, GROUTING OUTFITS, WEED SPRAY CARS, TIE SPRAYERS, TIE REMOVERS, TIE INSERTERS

On the GO with the PENNSY and the B&O

BENDIX

FUEL INJECTION EQUIPMENT!

Today more leading railroads than ever before are using Bendix Fuel Injection Equipment in all phases of their operation.

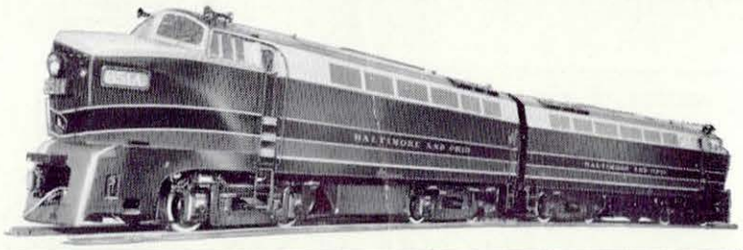
On sleek streamlined passenger trains or in yard switching, this outstanding fuel injection equipment is constantly demonstrating its efficiency and reliable performance.

Yes, on the Pennsy, the B & O, in fact wherever you go, you'll find Bendix Fuel Injection Equipment at work helping to maintain schedules and reduce operating costs.

SCINTILLA MAGNETO DIVISION of
SIDNEY, NEW YORK

Bendix
AVIATION CORPORATION

Western Office: 582 Market Street, San Francisco 4, California
Export Sales: Bendix International Division, 72 Fifth Ave., New York 11, N.Y.

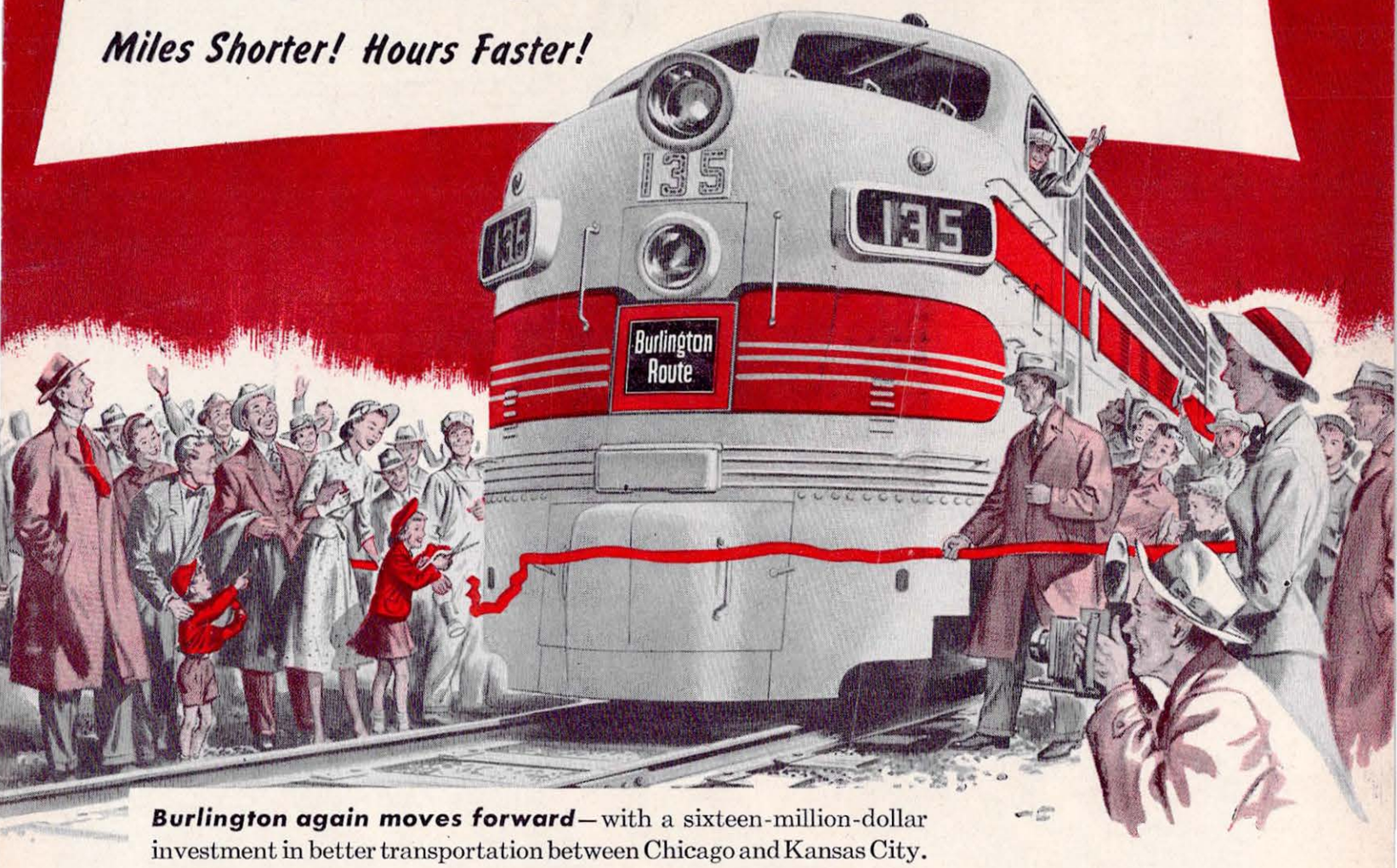


Opening October 28—Burlington's New

KANSAS CITY SHORT-CUT

The New High-Speed Freight Route between Chicago and Kansas City

Miles Shorter! Hours Faster!



Burlington again moves forward—with a sixteen-million-dollar investment in better transportation between Chicago and Kansas City.

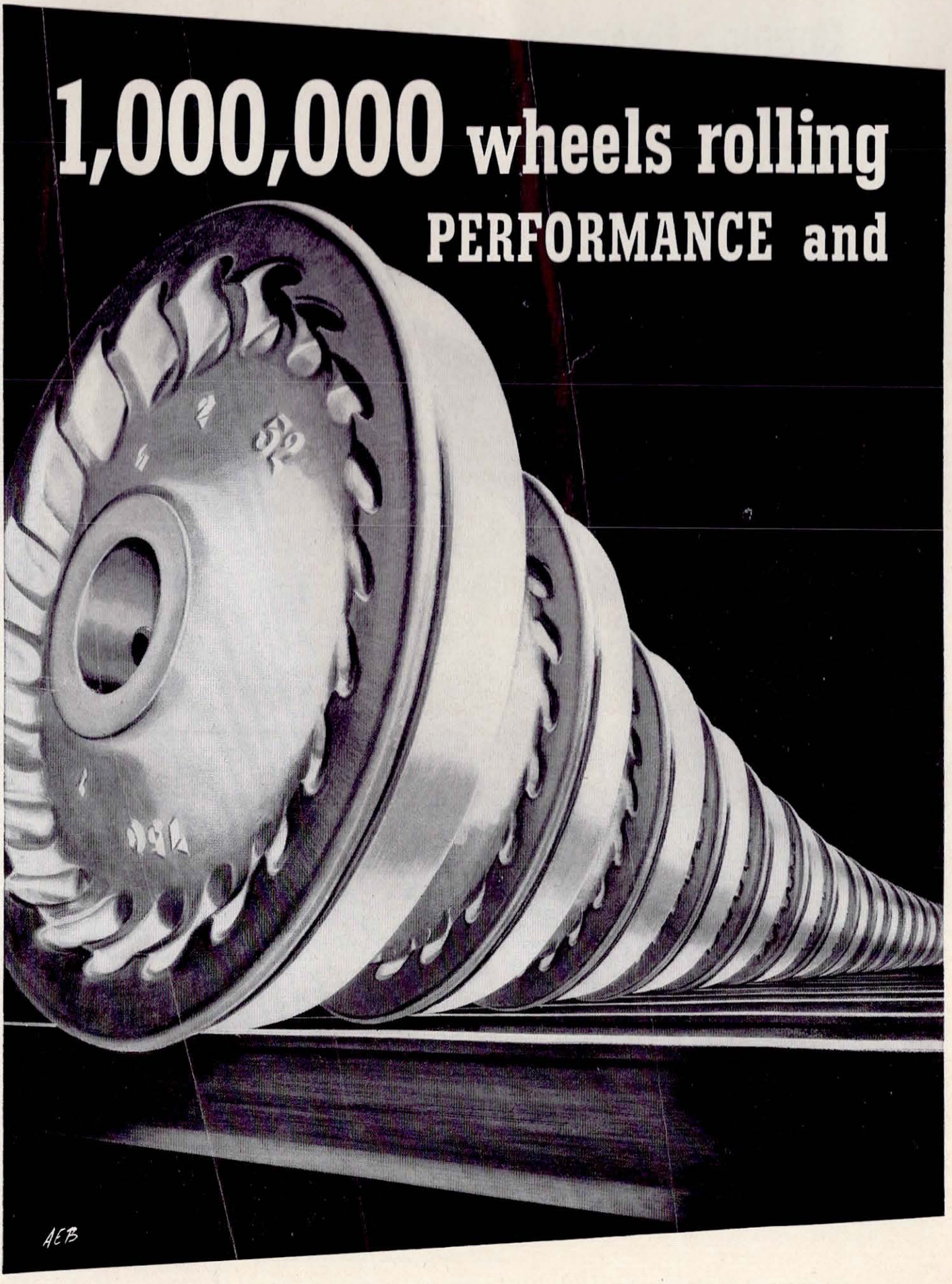
Opening for freight service October 28, the new KANSAS CITY SHORT-CUT straightens the curves, levels the hills and cuts the mileage. Over this new high-speed route, which includes a cut-off consisting of 49 miles of newly-constructed railroad, Burlington will provide dependable freight service second to none between these two great gateways.

BURLINGTON LINES • *Everywhere West*

Chicago, Burlington & Quincy Railroad
Colorado and Southern Railway
Fort Worth and Denver Railway

AN ESSENTIAL LINK IN TRANSCONTINENTAL TRANSPORTATION

Burlington Route


1,000,000 wheels rolling
PERFORMANCE and
AEB

toward IMPROVED GREATER SAFETY

Southern Wheel has now shipped over one million of the new cored-hub design, A.A.R. standard cast iron wheels—including 400,000 for new freight cars. This design, approved in 1950, assures railroads of improved performance and greater safety in the years to come.

Southern cored-hub wheels, with their special "sand rims", are engineered for maximum durability and strength at no extra cost.

Southern is proud to have pioneered in the production of this wheel and to have furnished since 1945 over one million of them for greater operating economy and safety.

GENERAL OFFICES: 230 Park Avenue, New York 17, New York. PLANTS: St. Louis, Mo.; Houston, Tex.; Birmingham, Ala.; Pittsburgh, Pa.; Toledo, Ohio; Portsmouth, Va.; Rochester, N. Y.

Still the best buy!

CHILLED CAR WHEELS

SOUTHERN WHEEL DIVISION

AMERICAN Brake Shoe COMPANY

AMCW

All These "Short-Line" Railroads Use

Albany & Northern Ry.

Arcade & Attica RR Corp.

Arkansas & Ozarks Ry.

Ashley, Drew & Northern Railway Co.

Atlantic & Western Ry. Co.

Baltimore & Annapolis RR

Coudersport & Port Allegany RR Co.

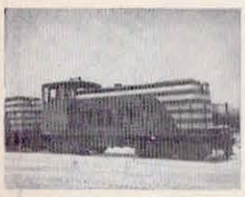
East Erie Commercial RR

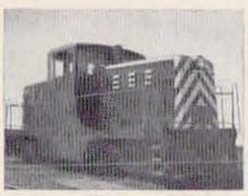
Fernwood, Columbia & Gulf Railroad Co.

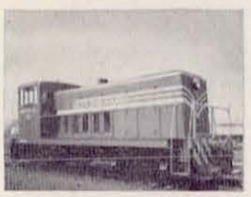
Fonda, Johnstown & Gloversville RR

Fordyce & Princeton RR Co.

Fore River RR Corp.


High Point, Thomasville & Denton RR


Hoosac Tunnel & Wilmington RR Co.


Kelly's Creek RR Co.

Lakeside & Marblehead RR

Lancaster & Chester Ry. Co.

Laurinburg & Southern RR

Monongahela Connecting Railroad

Muncie & Western RR Co.

Nelson & Albemarle Ry.

New York Dock Ry.

Norfolk Southern Ry. Co.

Northeast Oklahoma RR

Omaha, Lincoln & Beatrice Railway Co.

Pecos Valley Southern Ry.

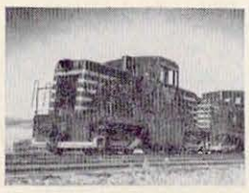
Pittsburgh, Allegheny & McKees Rocks RR Co.

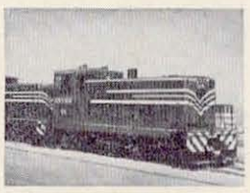
Point Comfort & Northern Railway Co.

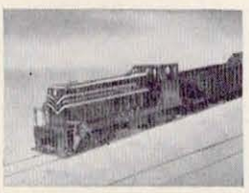
Quincy RR Co.

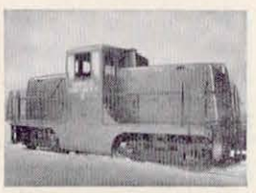
Rahway Valley Co.

Sanford & Eastern RR

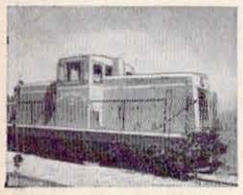

San Francisco & Napa Valley Railroad

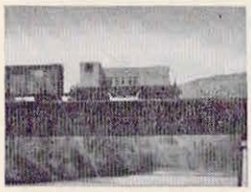

Santa Maria Valley RR. Co.

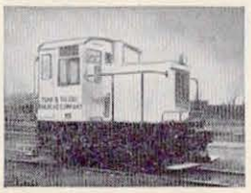

Saratoga & Schuylerville Railroad Corp.


Skaneateles Short Line RR

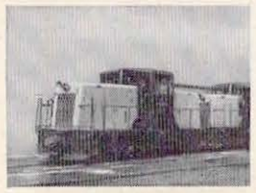
South Carolina State Ports Authority

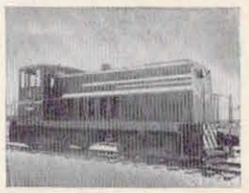

Suncook Valley RR


Tallulah Falls Ry. Co.

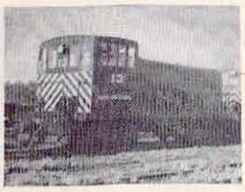

Tama & Toledo RR Co.

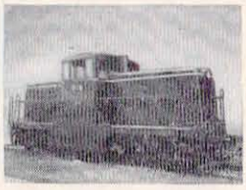
Unadilla Valley Ry. Co.

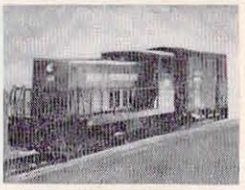

Union Freight RR Co.

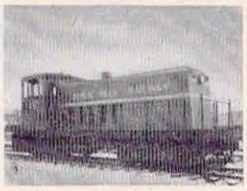

Ventura County Railway

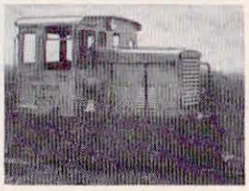
G-E Diesel-Electric Locomotives

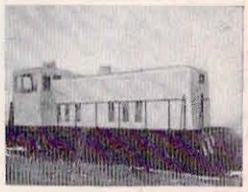

Barre & Chelsea RR Co.


Bath & Hammondsport RR

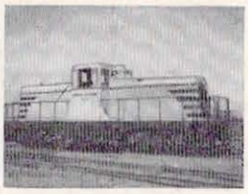

Belfast & Moosehead Lake Railroad Co.

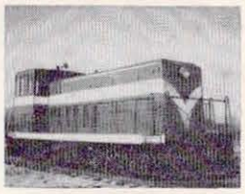

Berlin Mills Railway


Charles City Western Ry.

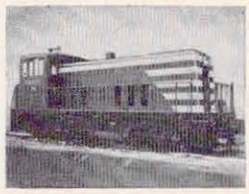

Condon, Kinzua & Southern Railroad Co.

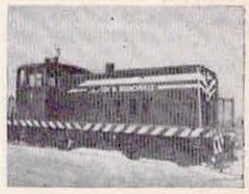
Frankfort & Cincinnati RR


Genesee & Wyoming RR


Georgia, Ashburn, Sylvester & Camilla

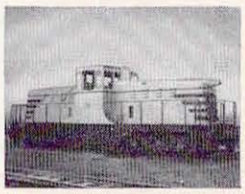
Grafton & Upton RR Co.

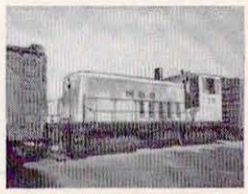

Greenville & Northern Ry.

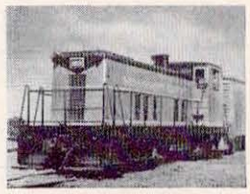

Hampton & Branchville RR

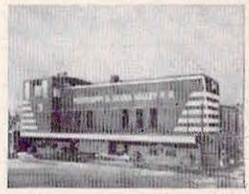
Live Oak, Perry & Gulf RR

Long Island Railroad Co.


Longview, Portland & Northern RR Co.


Marianna & Blountstown Railroad Co.

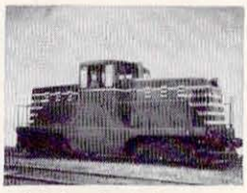

Mississippi Export RR Co.


Mississippi & Skuna Valley Railroad Co.

North Louisiana & Gulf RR

Okmulgee Northern Ry. Co.

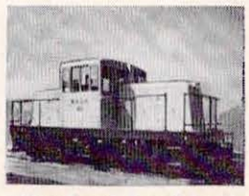
St. Johnsbury & Lamoille County RR


Salt Lake, Garfield & Western Ry. Co.

South Georgia Ry. Co.

Steelton & Highspire RR Co.

Washington & Old Dominion Railroad


Willamina & Grand Ronde Railroad Co.

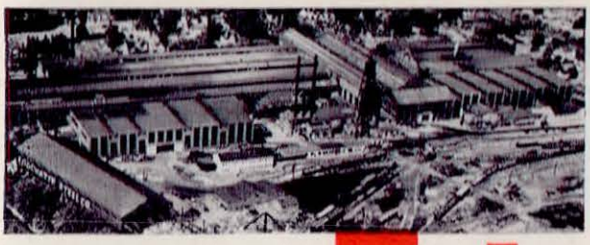
For All Roads... Whether Large or Small

The above 68 member lines of the American Short Line Railroad Association have one thing in common —they all use one or more G-E diesel-electric locomotives. Though representing only a fraction of the total users, they furnish evidence that, for large lines or small, G-E diesel-electrics provide dependable, economical service. For further information on the type of G-E diesel-electric locomotive best suited to your needs, contact your nearest G-E sales office, or write to *General Electric Co., Schenectady 5, N. Y.*

121-61

You can put your confidence in—

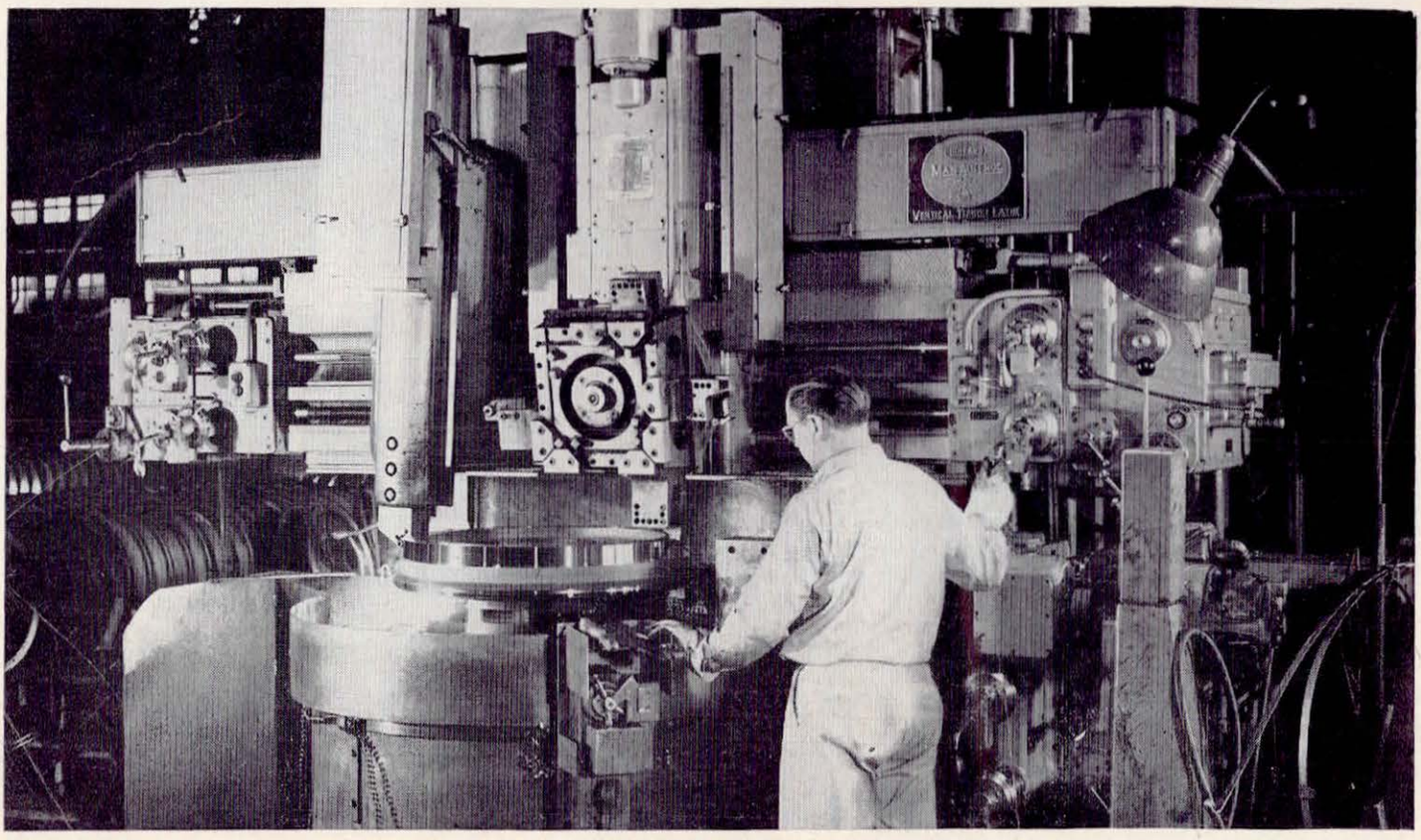
GENERAL ELECTRIC



Aerial view of the Edgewater Steel Company Oakmont plant, near Pittsburgh, Pa.

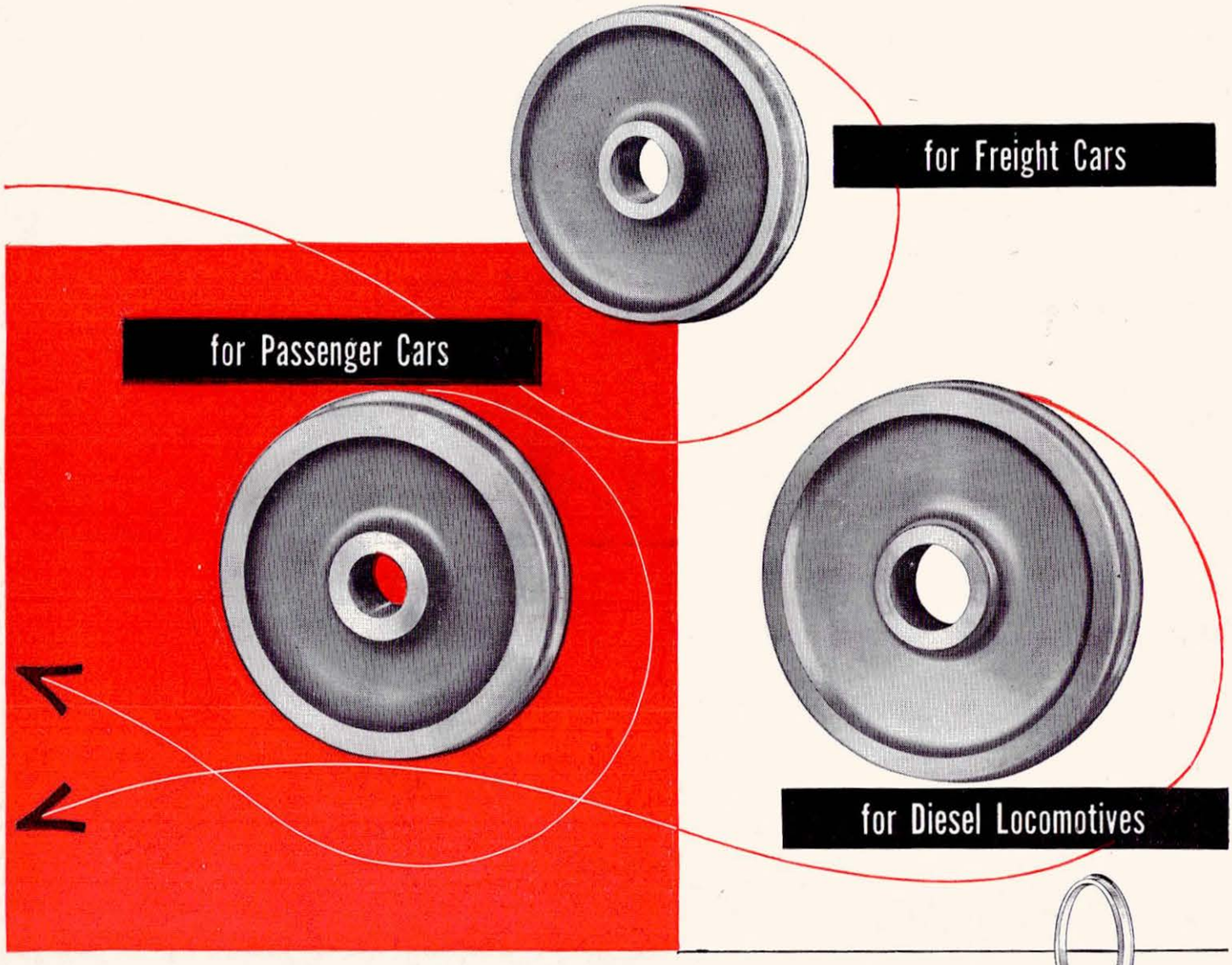
Edgewater

Edgewater rolled steel wheels for freight cars, passenger cars and Diesel locomotives are used by the country's leading railroads. They are made from steel produced in our own plant, and meet AAR and ASTM specifications. All manufacturing operations are under close control, and rigid inspection insures highest quality.



One of the precision car wheel lathes used to machine Edgewater Rolled Steel Wheels.

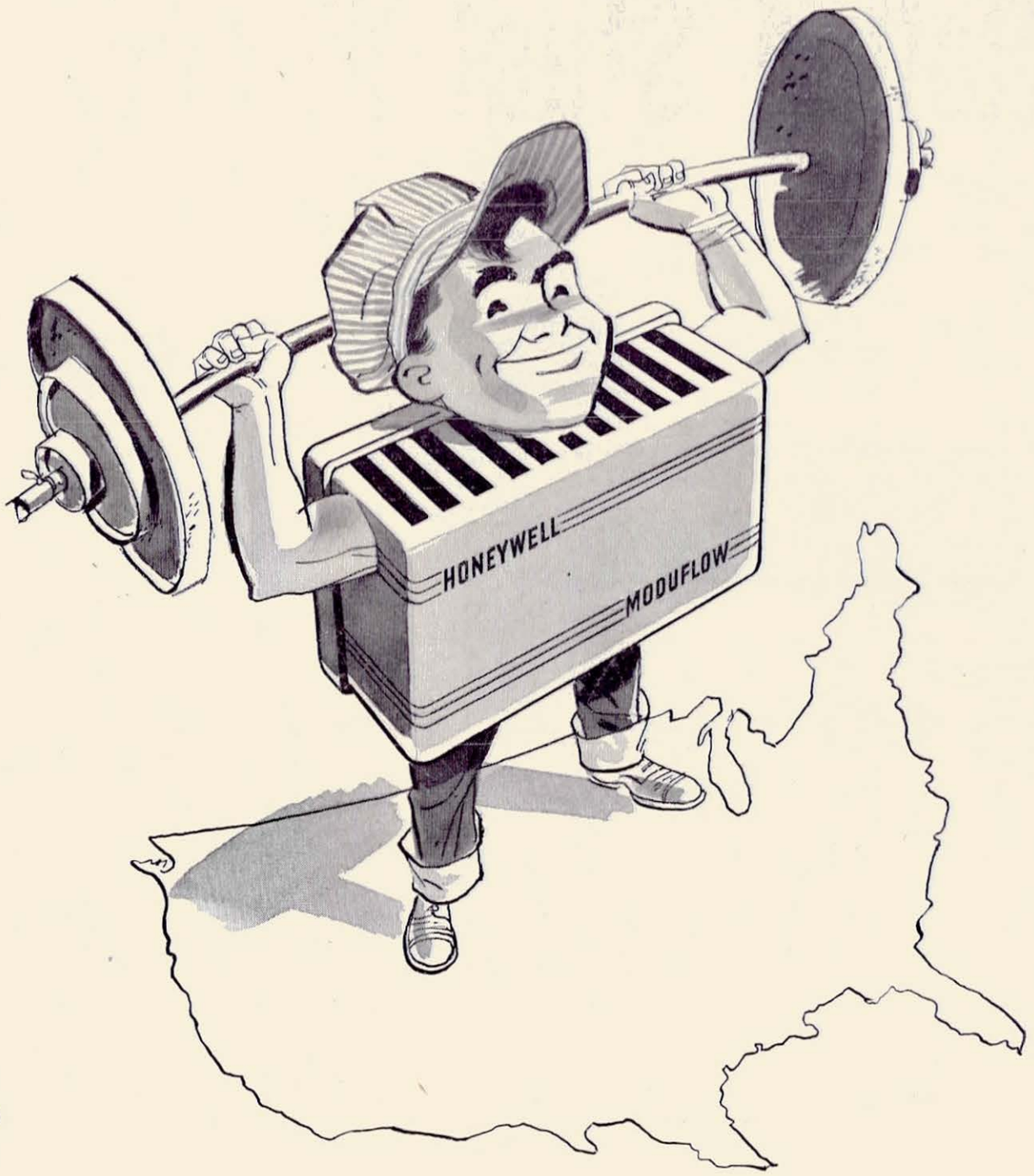
Rolled Steel Wheels



Edgewater Steel Company
Pittsburgh, Pa.

makers of
ROLLED STEEL TIRES
ROLLED STEEL WHEELS
DRAFT GEARS

Out of short pants and



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* *passenger car heating systems have been greatly simplified, with a marked reduction in maintenance parts.*
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But up to others, too. Because we'll profit the industry about as much as we're given opportunities by our friends. Things like a *real* chance to compete on all new and modernization jobs, to compare quality and performance. Encouragement to pioneer in the long-term interest of the railroads.

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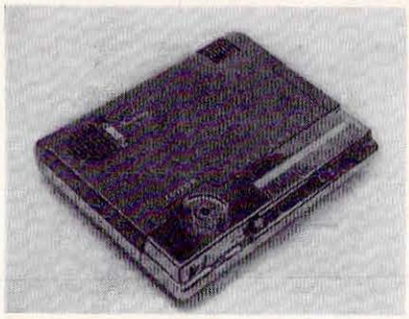
Lightweight Dictating Machine

Put on the market recently is a 12-lb. combination dictating-transcribing machine, produced by Thomas A. Edison, Inc. The book-shaped "VP Edison Voicewriter" is only 2½ in. thick. Recording is done on reusable Vinylite "diamond discs" which have a capacity of 30 minutes of dictation, 15 minutes per side. The weight given above includes the microphone, which also serves as a speaker for playing back the recording.



The "VP" operates on 25 volts of alternating current. A converter can be procured which makes it possible to use the instrument in an automobile or plane.

The "VP" easily fits into a brief case.

Retarder Speed Control

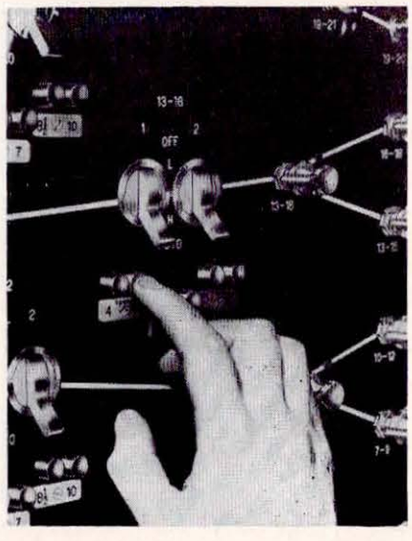
Preselection of speeds at which cars leave the retarders is the principal feature of the Type-R retarder speed control system recently placed in production by the Union Switch & Signal Division of Westinghouse Air Brake Company.

Selected by the operator, speeds are based on car weight, rolling characteristics of the track, weather and other factors. Normally, having selected a speed, the operator has no need to observe the speed of the cut while passing through the retarder or to manually control the retarder. The net result is that the operator can devote more time to observing the action and speed of cuts between retarders, and thus choose the proper speeds at which they should leave the retarders. He also is able to control a greater number of retarders efficiently. Selection of the speed at which the car or cut will leave the retarder is accomplished by pressing a push button mounted on the operator's control panel. Reduction or increase of pressure to secure the preselected speed is an automatic procedure performed as the car or cut travels through the retarder.

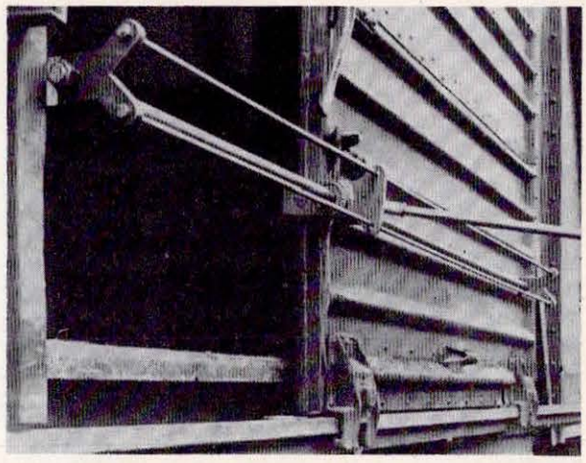
The retarder is normally closed, with the initial pressure determined by the selected speed, and automatically responsive to car-speed measurements. These measurements begin when the first wheels enter the retarder, and continue until the last pair leaves. Should a cut enter at a higher speed than that selected for leaving, initial pressure is maintained. Once a cut is slowed sufficiently, retarding pressure is reduced and regulated to maintain the selected speed. If a cut enters slower than desired leaving speed, the retarder is automatically released to permit acceleration. As soon as the speed has been sufficiently increased, retarding pressure is reapplied.

The speed control equipment is arranged in a rack-mounted, all-relay type unit. For multiple-section retarders, one such unit is required for each section. Each cut's speed in a retarder is checked by timing its movement over a series of short equal-length, single-rail track circuits. Elapsed time of occupancy of each circuit is accurately determined and used as a measure of the cut's average speed over that section.

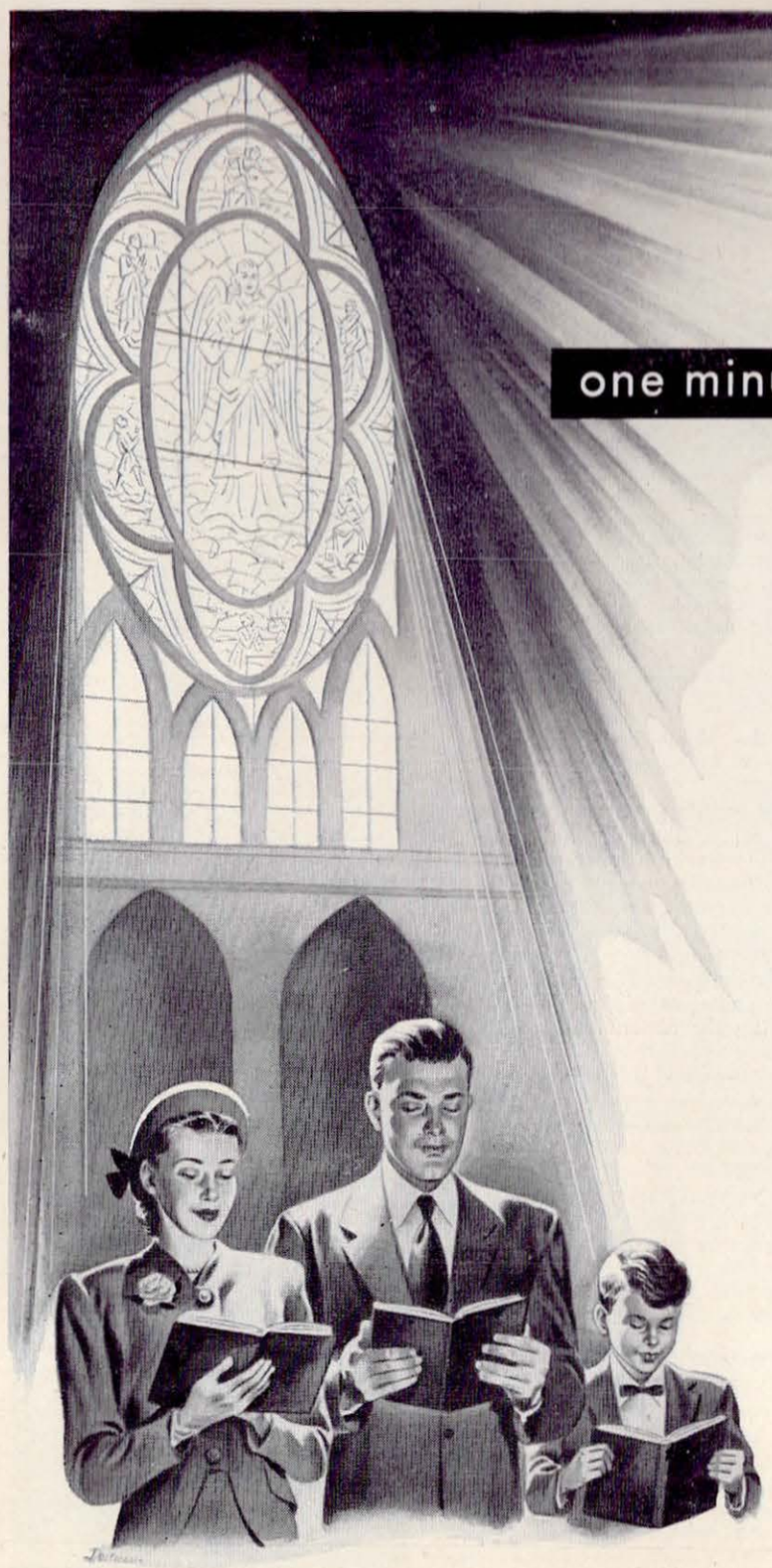
Track-occupancy time is measured by a relay-type counting chain, designed to record time intervals up to 700 milliseconds in length. Since it is controlled directly by the track relays, the counting chain operates repeatedly to make successive timing measurements as the leading pair of wheels occupies each track circuit in turn. The leading wheels thus produce a series of speed checks—one for each track circuit—as they progress through the retarder.



Selection of speed at which cars will leave a retarder is accomplished by pressing a push button on operator's control panel.



A 34-lb. freight car door opener has been put on the market by the Penco Engineering Company, 25 California street, San Francisco 11. The "E-Z Way Car Door Opener" smoothly exerts a 4,000-lb. direct and constant pressure by a jack action stroke in direct line with the opening and closing channel in which car doors ride.



one minute *for God* *for Nation*

THIS IS OUR MINUTE IN TIME.

It may not come again.

This is our minute to think, not to dream.
To speak, not to listen. To lead, not to follow.

Each of us — you, your family, your friends and neighbors, can . . . *must* do something to fill this minute with greatness.

Soon our country will select its leadership for the next few years. It is important that we select wisely. It is important that each of us register a choice by voting. But voting alone is not enough.

Let's do something more. Because only by "something more" can our leadership be made truly wise and this minute made great.

Our duty and our privilege are simple.

We need Faith —

To bring God to the Halls of Government; to restore Him to the Councils of Business; to return Him to the Front Room of Life. Let's do as wise men of old have always done. Let's spend our minute with God.

And as we reach for the ballot or the voting machine lever . . . let's reach into our hearts and find a prayer. Then, truly, this minute . . . our minute . . . will be great, that peace and happiness may visit our children.

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Write today for a copy of the article, "Our Four Great Faiths", and for reprints of this advertisement. Mail request to: J. B. Shores, Director, Employe-Public Relations, Texas and Pacific Railway, Dallas, Texas. No charge, of course.

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Benchmarks and Yardsticks

THE ONLY HIGHWAY TRAFFIC about which there is any appreciable controversy is that of heavy "over-the-road" vehicles—mostly outsized tractor-trailer combinations. These vehicles are providing long-haul freight service of exactly the kind offered by the railroads. There is no way that the division of such traffic between rail and highway may be made on the test of comparative economic merit, except by regulating both alike and having roadway expense for both charged on the same basis.

The favors enjoyed by these outsized long-haulers—in lax regulation, only fractional charges for highway use, and in excessive wear and tear to highways—make them just as much a pain in the neck to other users of the highways, and to the highway and tax authorities, as they are to the railroads.

The strategy of these long-haul freighters is to seek to identify themselves with the great majority of truck operators—e.g., local haulers and farmers—and with highway users generally. (There's nobody in this hen-house but us chickens, boss). They would like to have it believed that the railroads are perversely inimical, even, to the truckers who haul freight locally from railroad freight houses to consignees; and to the millions of trucks making local deliveries and connecting farms with market towns.

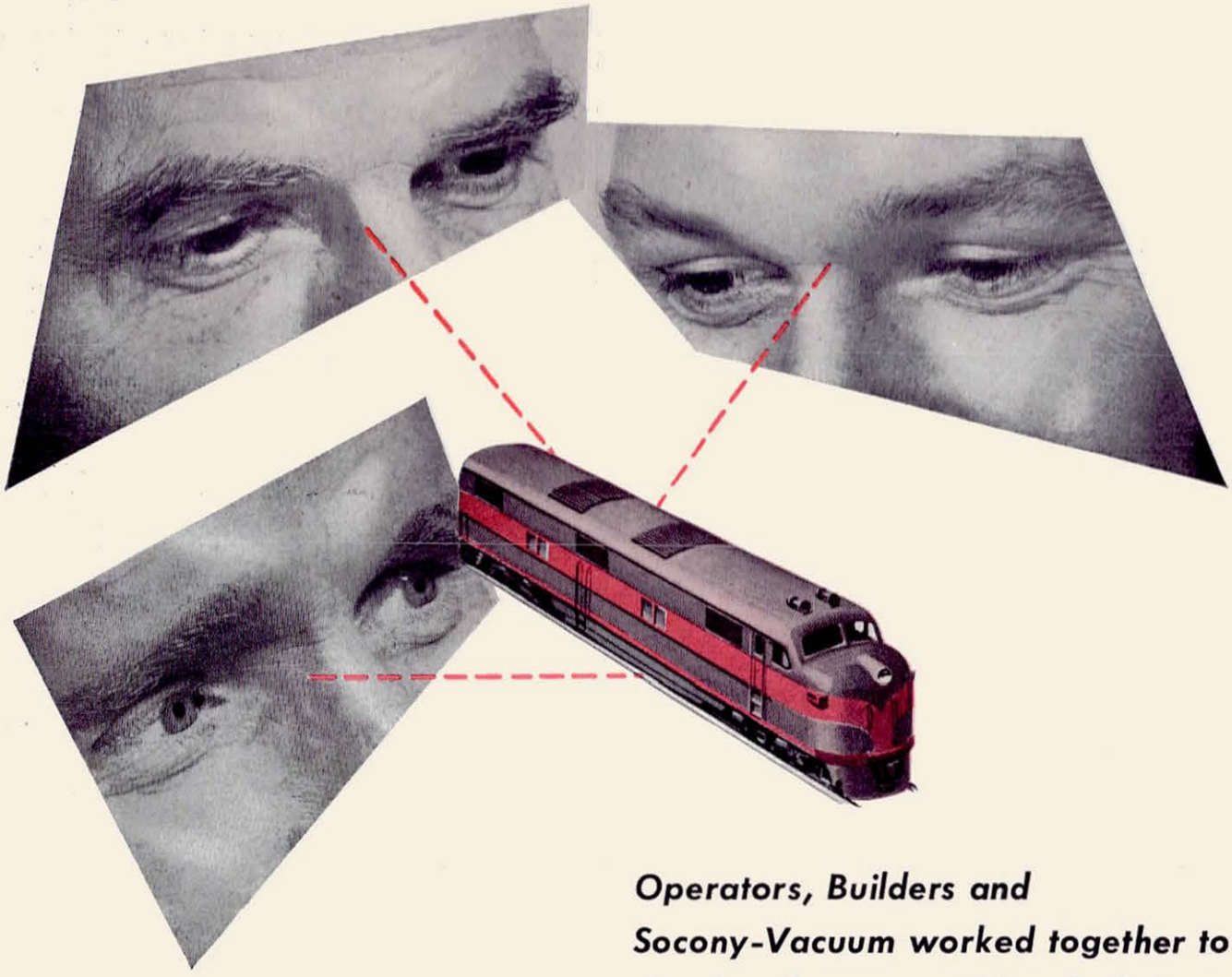
The great transportation controversy in America today is not at all one between "the railroads and the trucking industry"—which is what the outsized long-haulers would like to have people believe. The actual controversy lies between the heavy-duty freighters, on the one hand, and, on the other, practically all other Americans, including the railroads. This fact is so obvious that many railroaders are tempted to believe that all Americans understand it. But not all of them do.

There's nothing objectionable about the long-haul of freight by highway IF charges levied on such traffic are made fully compensatory for its proportionate share of highway expense (*plus* taxes toward general governmental expense); IF such long-haul highway traffic is subjected to the same degree of regulation exercised over similar traffic moving by other means; and IF sizes and weights are limited to accord with highway design and capacity.

A point of view toward the highway freighters which takes cognizance of the foregoing facts will conform with the public interest, as well as with the private interest of all other Americans, including the railroads—while not being in any way restrictive or unjust to the highway freighters themselves.

J. G. L.

TRAINED ON THE SAME PROBLEM...



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MR. KNUDSON'S COMPLAINT

Commissioner James K. Knudson, addressing the Short Line Association in San Francisco on October 3, accused this paper—not by name but unmistakably—of "irresponsibility." Our offense to the Commissioner's sensibilities was a casual reference in our September 22 issue to the restrictive attitude of the I.C.C. toward railroad provision of truck service. We were reviewing the report, "Railroads in the U.S.A.," written by the European railroadmen who visited these shores a couple of years ago under the auspices of the E.C.A. We observed that the Europeans "appear to believe that it is a specific provision of the Sherman Act—rather than a whim of the I.C.C.—which prevents the railroads from engaging in highway transportation on a much greater scale than is now permitted."

The essential accuracy of that characterization should be sufficiently obvious to anyone who has paid any heed to the Commission's record in this sector, making detailed documentation superfluous. Surely Commissioner Knudson recalls the cases wherein a couple of railroads were bereft of truck operating rights they already enjoyed—with strong dissents from three commissioners in both cases. He must recall that when these cases went to the Supreme Court, the Commission's position was upheld by a bare majority, four of the judges dissenting.

Certainly there was and is nothing in the specific wording of the statutes that *compelled* the Commission's majority to adopt its "little railroad" policy—else there could not have been so many dissenting opinions. In other words, the Commission majority's position was taken within the latitude of discretion allowed by the statutes. The restrictive policy not being required specifically by the statutes, where then did it come from, if not from the predilections of the majority? If there be a more charitable term than "whim" by which to characterize such predilections, we should be glad to use that term in substitution.

The irony in Commissioner Knudson's criticism lies in the fact that the central theme of his address was the contention that the law permits the Commission a wide latitude of action—so much so, indeed, that Mr. Knudson believes many of the reforms now being sought in the Interstate Commerce Act could be brought about with the statutes left exactly as they are. That's precisely what we believe about the Commission's power to be less restrictive than it has been about railroad truck operations—but when we said so, Mr. Knudson took offense.

This particular question of railroad provision of transportation by methods other than rail is one of principle rather than of acute practical significance, because—as far as we are aware—there exists no present lively desire on the part of the railroads to extend their operations by means of other forms of transportation. The principle at stake does not lose importance from this fact, but extended debate of it at this time could not very well be expected to produce results of tangible value. Our original mention of the matter was, consequently, only casual and further discussion is justified only in clarification of the point raised by Mr. Knudson.

The big question is—will the Commission exercise the latitude it enjoys constructively, positively to foster the public interest in a healthy national transportation system, or will it limit itself largely to the duties of an arresting officer? Too frequently—but not always—its attitude toward its duty has seemed to parallel that of the surgeon who reported proudly that the operation was a success, although the patient died.

It is the belief of this paper—and we shall not be offended if Mr. Knudson prefers to consider it a whim—that government interference in a business like transportation is justifiable only to the degree that it can be persuasively shown to advance the public interest beyond that which would obtain without government interference. The public interest—again according to our whim—would be better served by healthy transportation companies policed with only moderate severity,

than by companies emaciated by constant restraint and chastisement. An army confined to the guard-house can't get into much mischief, but it can't do much to protect the nation from its enemies either.

Placed as it is in a position of "fostering guardianship" over transportation (if the law doesn't establish this function, it at least doesn't forbid it), the I.C.C. might properly have a lively interest in the economic health of its wards; and might properly welcome the willingness of some of them to experiment with "department store transportation," to the degree not specifically prohibited by law, as a facet of healthy transportation competition as yet untried, but worthy of a trial. Judged by results—the healthy growth of the subjects of regulation—the state commissions have done a better job than the I.C.C. has with the railroads. And the state commissions have never to our knowledge tried to compartmentalize the gas utilities away from electric power or vice versa; nor has the frequent affiliation of the two types deprived the public of the "inherent advantages" of either of them.

This paper believes firmly in a concept of I.C.C. functions which would leave to that body its regulatory duties, decreased in proportion as increased competition makes detailed regulation less necessary; but with heavy reliance on the commission for policy leadership in a highly complex and important area of our economic life. To that end we have time and again advocated adequate salaries and adequate staff for the commission—as imperatively necessary to the creditable performance of its duties. If these duties are, in fact, less exalted than our concept of them—then, of course, disappointment at performance purely restrictive in character would be out of place. The commission will itself have to choose its career—whether that of statesman or policeman. The public need for policing railroad behavior is declining as competition more and more absorbs that function, but the need for statesmen in the development of a farsighted transportation policy was never so great.

SELLING AMERICAN RAILROADING ABROAD

During a conversation about the reaction of some European railroad officers to American methods, as a result of an E.C.A. survey tour of the U. S., someone brought up the point whether railways abroad are still as "indifferent" to American equipment, labor-saving tools and operating methods as they are alleged to have been in the past. It was the consensus of the group, in the first place, that railroad men abroad have always been *interested* in American practice; it is just they have never before felt it possible to follow it. Secondly, it was pointed out that economic conditions have changed. There is a growing consciousness on the part of Europe's railways that they are parts of a continental system of transportation.

These considerations bring to mind a report by O. A. Rosboro, vice-president of Vapor Heating Corporation, Chicago, after an extended visit in practically every European country in 1951. Since he had gone on similar missions in 1947 and in 1935, he was in a position to judge changes in conditions and policies. His finding was that never before had the railways there been so eager to coordinate their operations; and that "throughout Europe there is a definite interest in and desire to follow U. S. A. railways—both in equipment design and operation."

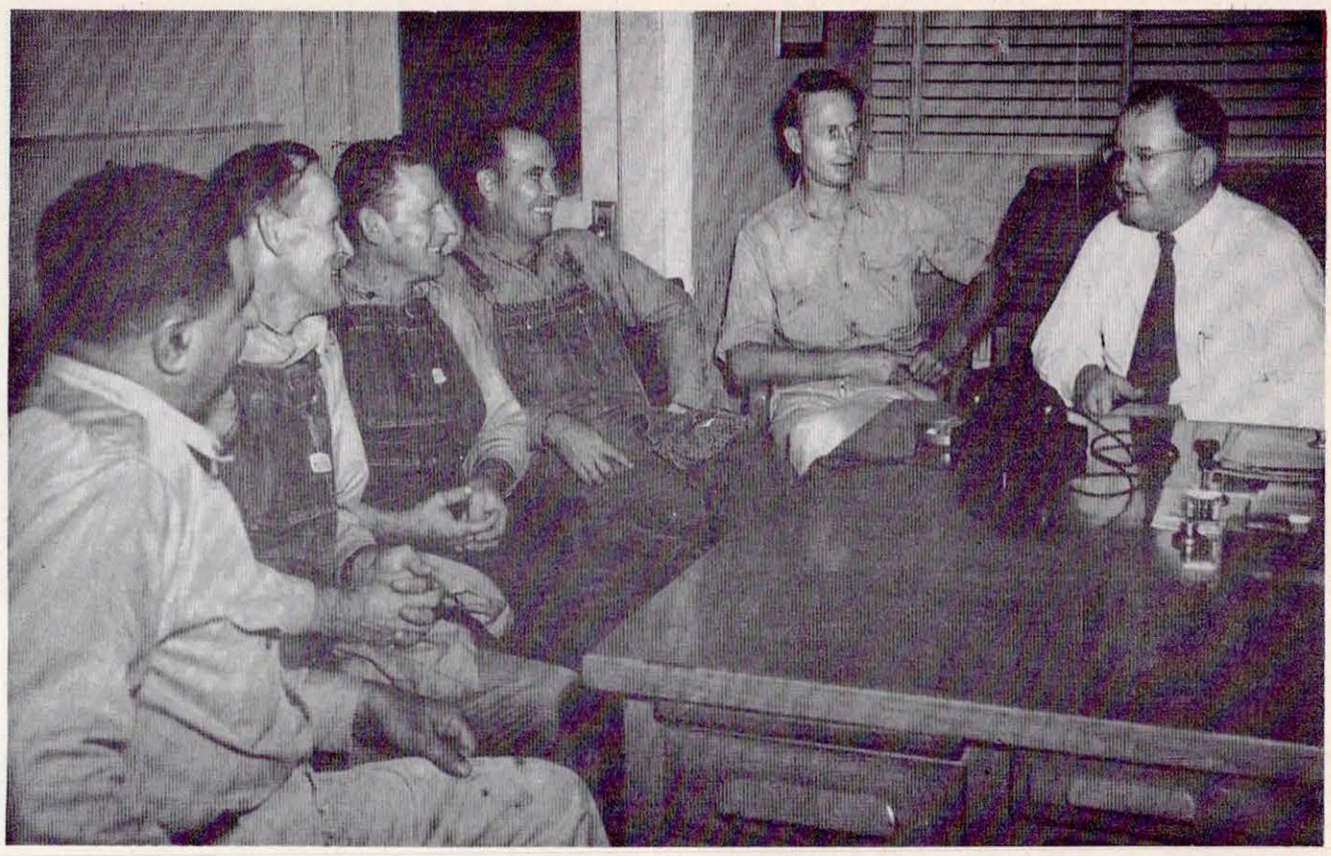
The question arises, of course, whether it does us Americans any good to be "learned off of"—especially since most of the educational visits made since the war have been at our expense. The answer does not lie entirely in the language of commerce. The fact is that this country is a world power. Other countries are going to practice *somebody's* economics—why not ours?

The business side of the question is this: European countries are more interested in our railroad equipment and methods than they have ever been heretofore. But they cannot, except where they obtain Marshall Plan aid, pay for equipment of American manufacture *as a common practice;* nor can they, being state-owned, risk the censure of domestic business and labor where unemployment already exists.

The solution is the system of licensing of U. S. designs for equipment, appliances and tools for manufacture abroad by approved concerns. This is a growing practice, which is likely to become as popular in the fifties as was the establishment of branch plants abroad by American firms during the freer, hard-currency days of the twenties. While the royalties accruing from licensing are not calculated to bring in much money, they constitute income, nevertheless, and without risk of loss of fixed property. Furthermore, there is often tied in with licensing the profitable export of components which cannot be made as cheaply or as well abroad.

Mr. Rosboro reported that the German roads, as before the war, continue to rely on their own shops for most new equipment, leaving the country's large and skillful railway supply business to hunt for trade in other countries. Because their market is interested in American practices, the German firms have "an unmistakable desire" to obtain licenses to manufacture American products. In other countries there is a tendency to rely more on commercial suppliers.

There seems to be little tendency by European governments to go chasing will-o'-the-wisps in deciding where to put their available transportation capital—unlike some richer governments we know of. That should mean a high, sustained market for railway equipment and tools for somebody to supply. In Mr. Rosboro's opinion, getting U. S. technical magazines into the hands of the officers of European railways would be a big help toward further ripening that market for U. S. products.



Not all conferences are all smiles when the local chairmen meet with the general foreman, but all are conducted in an atmosphere of good will and mutual respect.

How the Southern Pacific Cultivates Human Relations

Program includes conferences for supervisors and for employees who deal with public—What it has done at the Houston shops

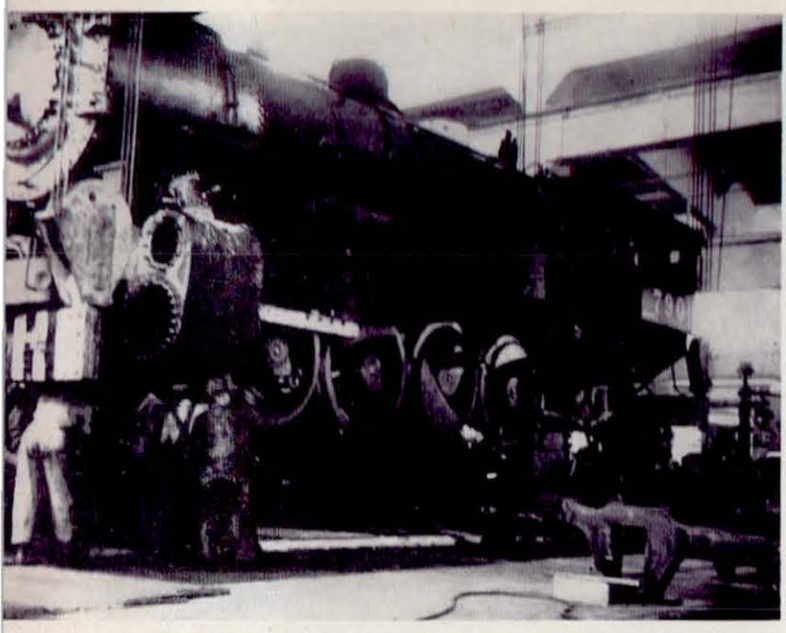
Imagine the following occurrence taking place in a railroad shop in the last few years:

A fleet of steam locomotives had to be returned to service to meet urgent traffic demands. All required drop-pit and other heavy repair work. To complete this work in minimum time it was necessary to place the shop on a three-shift basis. Even though all the older experienced men were on the first shift, and of course held seniority rights entitling them to remain on that shift, first-trick men, including those with as much as 35 years of seniority, agreed voluntarily to work second and third shift assignments to spread the supply of experienced mechanics throughout the three shifts.

And this is only half the story of this remarkable demonstration of labor cooperation. The men not only agreed to take jobs on the less desirable shifts—they further agreed to make this sacrifice for an indefinite period, which was to run until the emergency was past. The length of the emergency furthermore could only be guessed at; the men were told that the new assignment might run anywhere from one to six months. Still there was no hesitation in acceptance. The changeover, which involved some 200 men, was made with a minimum loss in efficiency of shop operation.

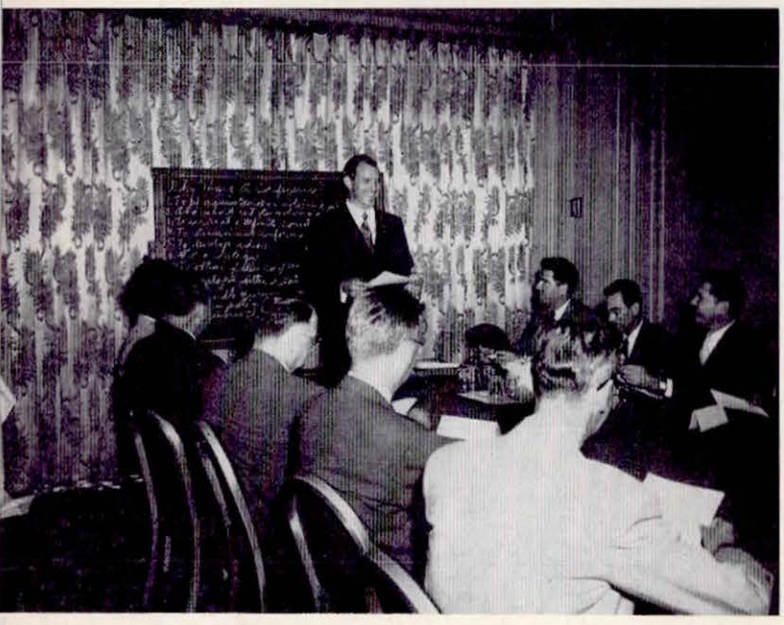
This happened at the Houston general shops of the Southern Pacific Lines in Texas and Louisiana (Texas & New Orleans). It is but one of many examples that could be mentioned to show the effectiveness of what the Southern Pacific terms its human relations program. Other examples could be related by the dozens to indicate the unusual success of the SP endeavor.

Considering the shop aspect of the program alone, and using the large Houston shops as an example, there has been a substantial decline in the number of written



To distribute experienced mechanics throughout the three shifts during an emergency, first-trick men agreed voluntarily to work second and third shift assignments.

The student employees learn by doing, as in the above case of a training program conference on how to conduct a safety meeting.



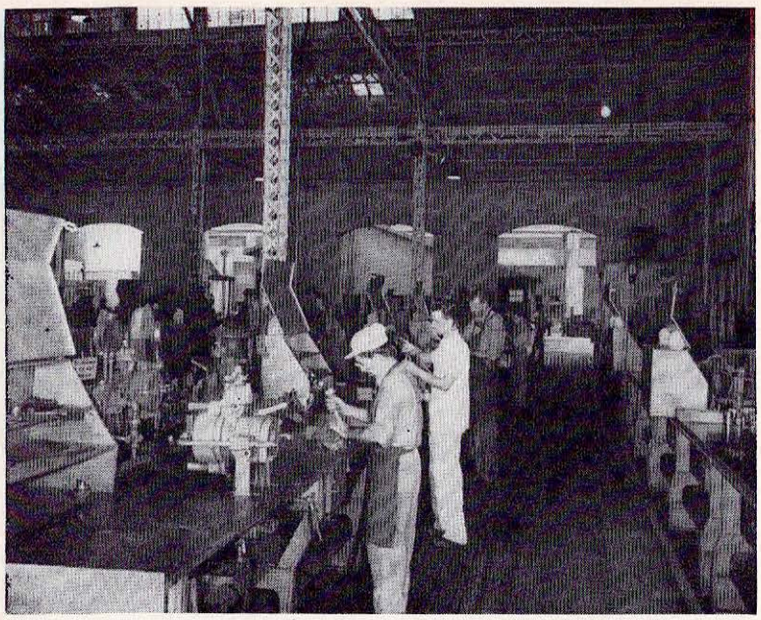
Cornerstone of the SP program are courses in basic human relations, personality, tact and diplomacy conducted by outside experts.

Safety is a prime objective of the human relations program, the success of which is evidenced by the Houston shops going 444 days without a reportable accident.

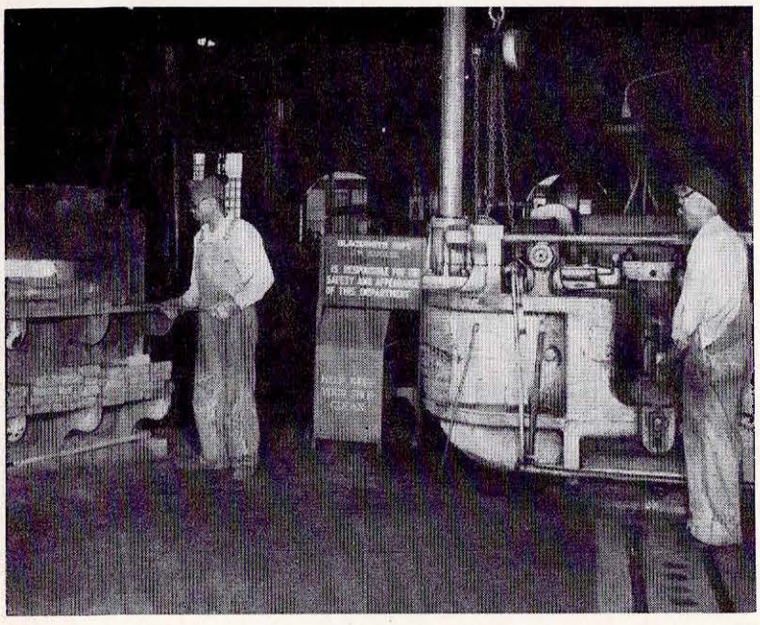
grievances since the program was started. Most grievances are now settled across a conference table. There is no lack of trust. Neither is there continued bickering over trivial points for fear of setting a precedent. The discussions proceed in an atmosphere of mutual confidence and respect, in which issues are discussed calmly, logically and without anger.

The beneficial effects of the program have taken place without impairing management's functions. There is no lack of discipline, and penalties are meted out in cases of wrongdoing. In discipline cases the man generally accepts his responsibility on the advice of and in concurrence with his representative, thereby eliminating necessity for lengthy hearings. This forms another in the series of good examples of the mutual trust in which labor-management relations are conducted at this shop.

Mutual trust between employee and management is also exemplified in reporting and handling accidents. With few exceptions, full and complete information on accidents is voluntarily given to the foreman by the man involved. This information includes divulging any practices the man might have wrongfully engaged in, and which could have been a factor in the accident that resulted. The information, favorable or unfavorable to the man involved, is freely related because the men realize that the purpose of gathering the information is



The air-brake-repair area typifies the neatness and cleanliness which are clearly evident in all parts of the SP's Houston shops.



Contributing to cooperation in keeping the shops clean are conspicuous signs indicating the person responsible for each area.

to prevent future accidents, not to punish the man. Management, in its turn, scrupulously lives up to its part of the pact by giving consistent fair treatment.

Cornerstone of the Program

The key to the harmony and the cordial feelings between labor and management, and between individuals within each group—as well as to the courteous manner of SP employees toward the shipping and traveling public—is the railroad's extensive cultivation of good human relations. The training program on this subject covers nearly 5,000 employees per year.

Two series of courses are given in the form of conferences, both having the general objective of getting maximum cooperation from people being dealt with. One course is for supervisors from foremen on up to department heads and general officers. The second is for employees who deal directly with the public—ticket and freight agents, freight and passenger train crews, redcaps, claim agents, etc.

Courses Treat Similar Subjects

Both courses cover basic human relations, personality, tact and diplomacy. The course for employees meeting the public includes sales strategy, which is not included in the supervisory course, while the latter covers certain subjects not included in the "contact personnel" courses. Among these are leadership, how to reprimand, organizing a department, and the delegation of responsibility.

The teaching part of the program is conducted by Hob Ferguson & Associates of San Francisco, a management consultant firm specializing in industrial conference leading, human relations and salesmanship. The teaching is done mainly in conference style without formal lectures. Those who attend learn by doing, for the most part, through participating instruction. Conference attendance on the part of the employees is entirely voluntary, although many conferences are held on company time.

The men trained at the Houston general shops include all supervisors from the shop superintendent down to the assistant first line supervisors, all union representatives, and safety representatives. This training has been given over a five-year period as follows:

1948—16 hours of conference training in basic human relations, i.e., leadership, supervision, reprimand, personality, handling problems, tact and diplomacy.

1949 and 1950—8 to 10 hours of advanced training in human relations.

1951—10 hours of training on planning the work, organizing a department for efficient operation, how to delegate responsibility and authority, types of orders and how to give them, effective use of the executive's time, and how to simplify work and make it easier for the operator.

1952—15 hours of training in conference leading. This was aimed at teaching the supervisor how to get active participation from the employees in the operation of the shop, and at improving communications between people.

Course Divided into Six Divisions

The course in conference leading exemplifies the thoroughness of the different training courses. This course is divided into six main divisions—why have a conference, what to do for best results, the individual as a conference leader, the duties of the conference leader, helpful hints for the leader, and how the nature of the problem determines the kind of conference to use. Eleven points are listed under the first heading, six under the second, etc., each a proved practical aid to the leader and the conferees.

This program was not merely thought of, instituted and then allowed to remain static. It is worked at steadily day by day to assure continuing success. Every other day, for example, five minutes of the supervisors' meeting are devoted to the program, how to keep it active and how to improve it. On alternate days the five-minute period is devoted to safety matters, a related subject

Foremen vie for a pennant award given to the department with the cleanest area during the previous three months.

An important function of the human relations training program is teaching supervisors how to instruct their men.

and one that is aided by the human relations program.

The value of the human relations program in promoting safety is attested by the shop record. At the time the material for this article was gathered, it had been 444 days since the last reportable (lost time) accident. To maintain this record several procedures are followed day in and day out. Two safety committee men in each department report daily to the foreman any hazards found. Wearing safety shoes, and other practices conducive to safe working conditions, are actively encouraged. Neatness is emphasized strongly.

Neatness Stressed

The value which the SP places on neatness, which of course is directly related to safety, is well shown by the daily work procedure.

The employees have enthusiastically accepted the importance of good housekeeping and they see to it that their machine bench or work area is clean and orderly before quitting time each day. Things to be left overnight are stored in an orderly manner. The resulting neatness and cleanliness of the shop are felt to contribute effectively toward both the quantity and the quality of production.

The shops are divided into general sections, each kept clean by a laborer. Signs show the name of the man who is responsible for keeping each area clean. Individual machines within any area are kept clean by the operator, and here too a sign indicates the person responsible for the cleanliness of the machine and the neatness of the area surrounding it.

By this cooperation the actual cleaning force does not have to be large to maintain the unusual degree of cleanliness found at Houston. For example, one man takes care of cleaning and keeping clean and neat the entire blacksmith shop, and it is doubtful if any cleaner or neater blacksmith shop, or any other shop for that matter, can be found on any railroad.

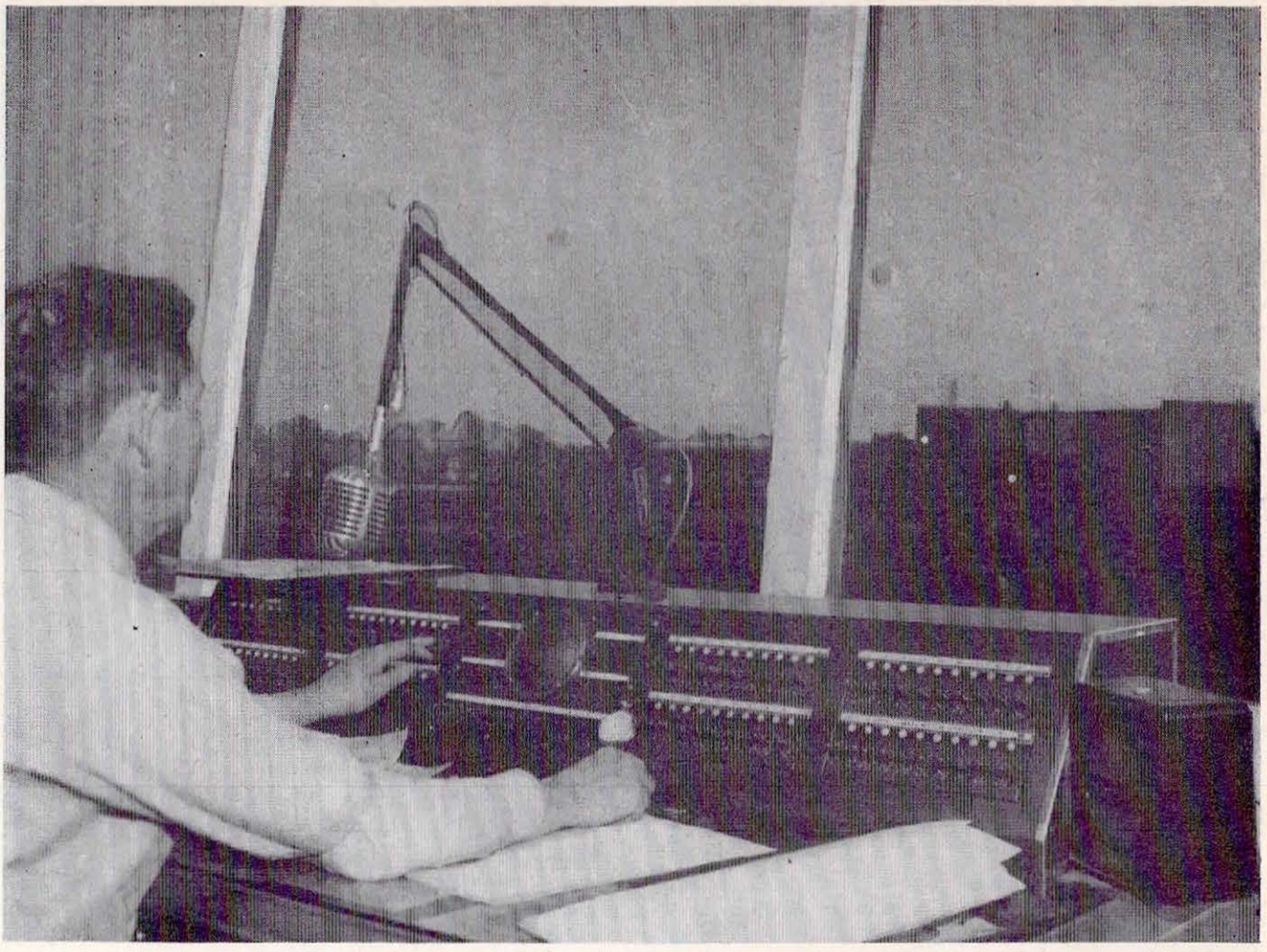
Competition between different departments keeps each department on its toes. Every 90 days a committee from one department inspects and rates another, and the best department gets a banner which it keeps for the following 90 days. When the human relations program was first started the scores ran from 60 to 80; now the scores run from the 80's to as high as 99.

The human relations program has increased the number of employees active in civic affairs, one reason probably being a sharpened confidence in their ability to deal with others. The SP in turn encourages community activity on the part of employees, feeling that it helps to identify the railroad with the community. It further does all that it can to help a man who is interested in becoming active in his neighborhood whether for public office or joining a club.

Civic Relations Also Benefit

In another aspect of civic relations the value of the human relations program is further proved. With the new friendly spirit between men and management, the unions have gone all out in aiding the railroad in the Community Chest drives. The result has been a steady increase in employee donations at the shops from $5,000 in 1946 to $18,000 in 1951. Comparable increases have occurred in Red Cross drives and in blood donations.

While the program has been highly successful, the Southern Pacific by no means considers it perfected or to the state where it cannot be improved or enlarged upon.



The control console for the loudspeaker system is on yardmaster's desk on the top floor of the tower.

On the Atlantic Coast Line . . .

Lots of Uses for Talk-Back Loudspeakers

Paging and talk-back speakers in a yard 2.8 miles long are controlled by yardmaster in a tower for two-way conversations with yard crews

To expedite operations in a large flat yard at Florence, S.C., the Atlantic Coast Line uses an extensive installation of talk-back loudspeakers for two-way communication between the yardmaster (in his office) and switching crews working in the yard and industrial areas nearby. Florence is an important terminal and junction, 293 miles south of Richmond, Va., on the double-track main line south to Jacksonville, serving points in South Carolina, Georgia, Florida and Alabama.

The yard at Florence, which is 2.8 miles long, handles approximately 3,000 cars in and out daily—not including cars delivered to or received from industries. Here most trains of dry freight are classified into blocks. For example, northbound cars are separated into blocks for (1) Richmond (general), (2) RF&P at Richmond, and (3) north of Richmond, other than RF&P. Southbound cars are blocked for three separate destinations. At Florence, also, trains are made up for four other lines.

Northbound cars of perishables are reiced at Florence. As a general rule, not more than one hour or one hour and 15 minutes elapses from the time a train arrives until the cars are classified, made up in trains, and are ready for departure.

Crews Are Well Organized

Diesel-electric switch engines are used exclusively. Four yard engines are assigned to the first trick daily.

To call the yardmaster, a foreman presses button on mast of talk-back speaker.

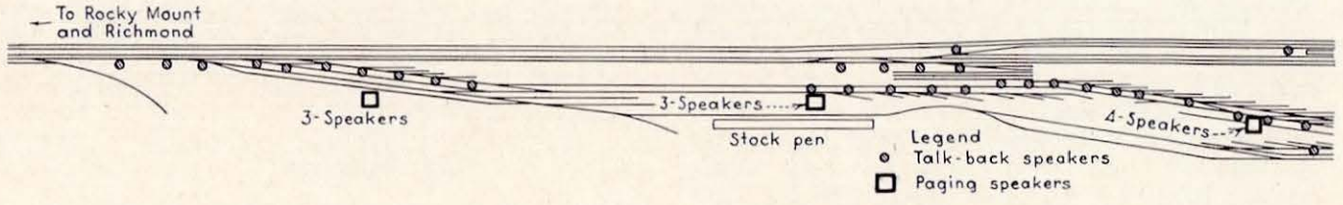
six crews to the second trick, and five to the third trick, for service solely within the yard. In addition, one yard engine is assigned to industrial work on the first trick, and one on the second trick. The yard crews work under the direction of the yardmaster, who has his office in a glassed-in tower over the yard office, which is centrally located. Formerly, the yardmaster spent most of his time walking over the yard in an attempt to maintain operations in a flexible state. Now he sits at his desk where he can watch operations in the yard, using the loudspeaker system to talk with crews anywhere in the yard area.

Talk-Back Speaker Locations

The talk-back speakers are spaced about 175 ft. apart along the two principal switching ladders, along which most of the switching moves are made. A weatherproof push-button is mounted in the mast of each of these loudspeaker installations. There are additional speakers on the ice platform, crew dispatcher's office, yard clerk's office, and at other places; a total of 65 of these speakers being in service in this yard, as indicated on the plan. Each talk-back speaker is connected to a console in the yardmaster's tower. Corresponding with each incoming circuit, there is a small toggle key and an indication lamp on the panel of the console on the yardmaster's desk.

If a foreman wants to call the yardmaster, he goes to the nearest talk-back location and presses a push-button on the pipe mast. This causes a buzzer to sound in the yardmaster's office, and at the same time, on the yardmaster's console, the white indication lamp is lighted over the small key corresponding with that circuit. The yardmaster pulls that key to the down position and acknowledges the call. When the yardmaster wants to talk to the foreman of a crew, he presses down on the key of the circuit extending to the talk-back location nearest to that crew. Then he steps on his foot switch, and speaks into his microphone. His voice can be heard within a range of 100 ft. or more of each talk-back speaker. The yardmaster releases the foot switch to listen. The foreman, or other member of the crew working near the talk-back, answers the yardmaster. Thus a contact is made by direct calling and answering.

If the yardmaster does not know the whereabouts of a foreman, he puts out a call on the paging speakers. The foreman uses the nearest talk-back, and by pressing the push-button on the pipe mast he can communicate quickly with the yardmaster's office. The paging speak-



Layout of yard, indicating the locations of the offices . . .

ers are mounted on buildings and towers so that they have a range of several hundred feet.

The talk-back loudspeaker system in Florence yard is being used to advantage in expediting switching, coordinating the work of the different crews, and improving safety of yard operations. Example: When a classification track is nearly full, the crew foreman can so advise the yardmaster by talk-back speaker. The yardmaster than puts out a call via loudspeakers to the foreman of a crew working near the other end of that track, directing him to watch while the track is being "shoved." That foreman keeps the yardmaster advised, and he in turn tells the foreman of the crew doing the shoving, so that they can stop before pushing cars out of the other end of the track. This saves time and damage.

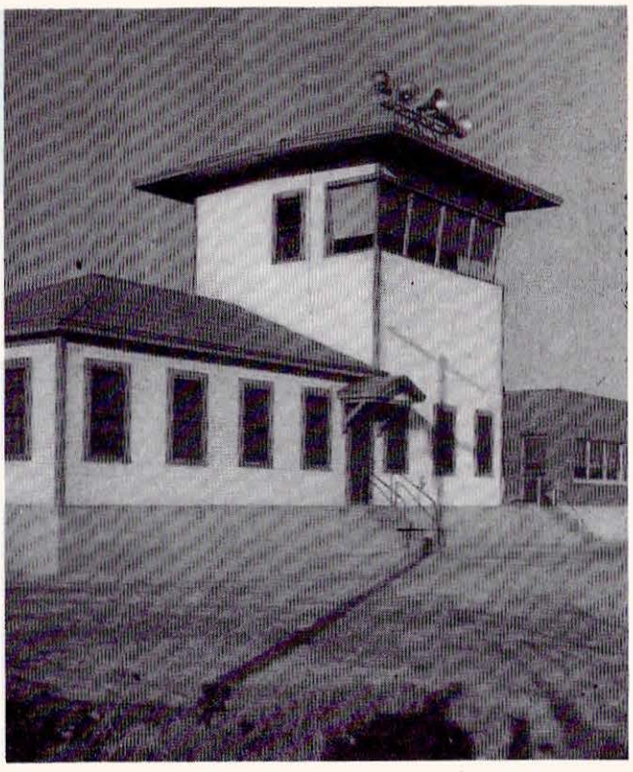
Yard Operations Expedited

Another example: Five of the talk-back speakers are on the ice platform, so that the yardmaster can talk with the men working there to give them information concerning the icing of cars that is not shown on the switch list. This has expedited reicing operations, particularly in servicing the solid trains of perishables. Talk-back speakers, conveniently placed for the mechanical forces, are used frequently by the yardmaster to call car men to repair some minor defect on a car in a train that has just arrived. Previously, 10 to 15 minutes were required to call a car man. Now he usually can be called, and the repairs accomplished, while the car is still in classification, without delay to the train.

Interior Systems

The terminal trainmaster's office is on the ground floor of the yard tower. The terminal trainmaster has a Teletalk intercommunication console on his desk with connections to the desks of (1) his chief clerk; (2) the yardmaster; (3) car record clerk; (4) bill clerk; and (5) the "WG" telegraph office. This installation is so arranged that the terminal trainmaster can call any of these five outlets, or any of them can call him, by pushing a button on the speaker. The terminal trainmaster can monitor any one or all of the five stations any time. The district superintendent's office is on the second floor of the Florence passenger station, some distance from the tower. A set in his office is connected to a talk-back speaker on the yardmaster's desk at the yard office. With this equipment, the superintendent can monitor all communications on the talk-back and paging system, and can readily reach the yardmaster in the tower.

Each of the talk-back speaker locations along the switching leads in the yard consists of two 3-watt loudspeakers, mounted back-to-back, in a housing on top of a 3-in. pipe mast 8 ft. high. Single speakers of the same type are used at some locations on the outside of buildings. Indoor speakers are used in the crew clerk's office and

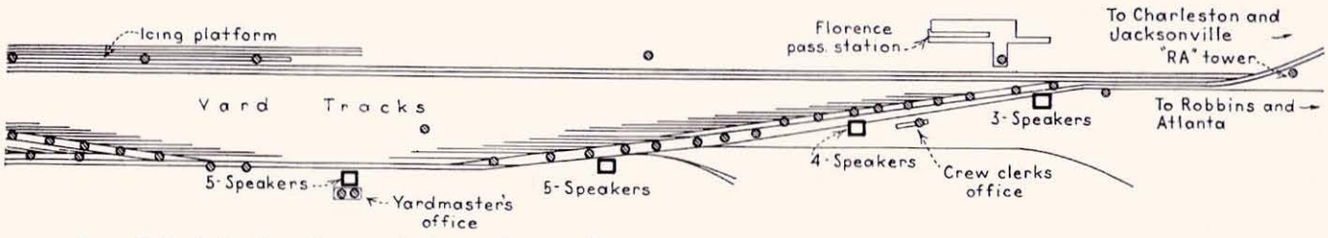


There is a group of paging speakers on top of the tower.

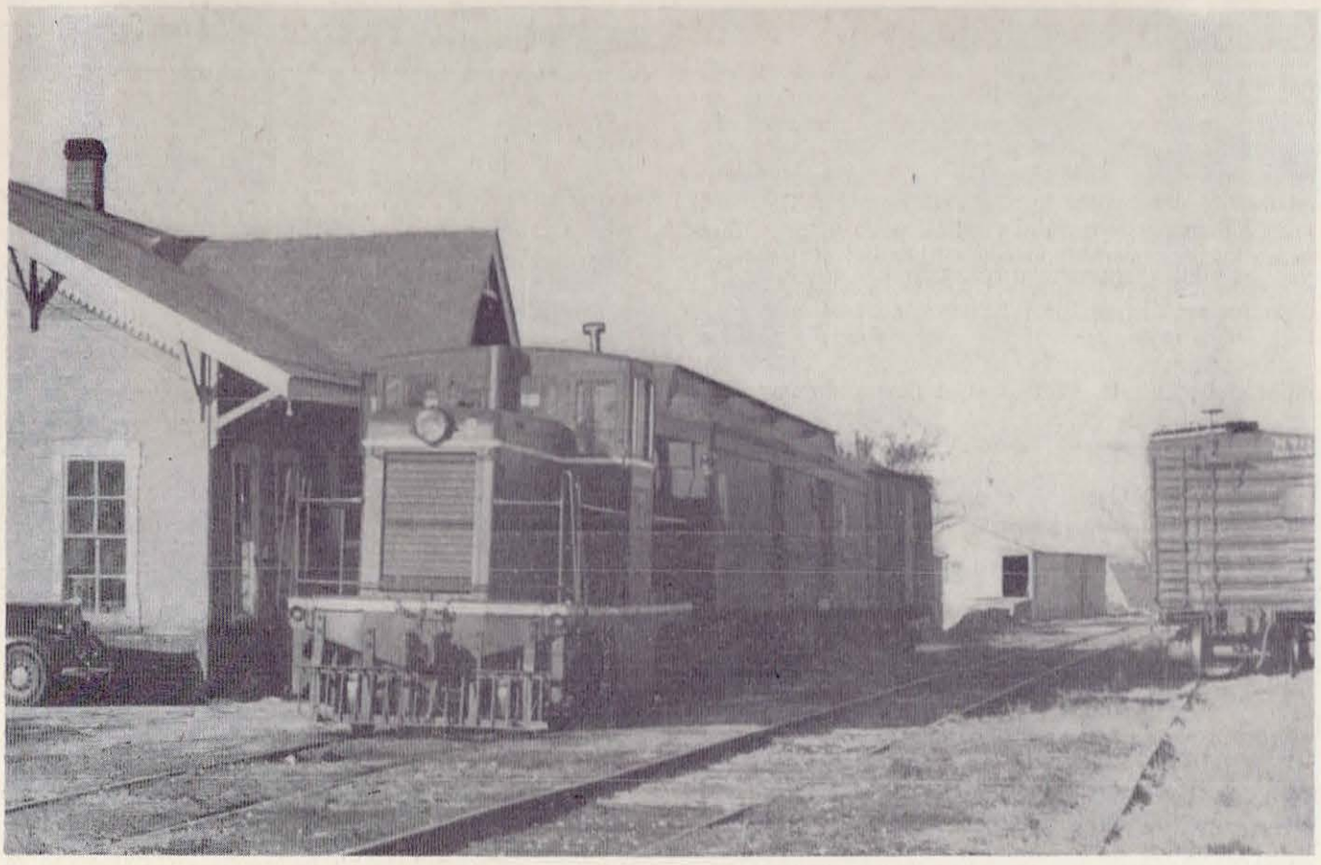
"RA" interlocking tower. The paging speakers are mounted in groups on top of the yard office building and on floodlight towers. These speakers are the reentrant trumpet type with 24.5-in. horns, and rated at 30 watts.

Yardmaster's Control Console

The yardmaster's console is six feet long. The center panel includes a small loudspeaker, below which is a row of keys for controlling the paging speakers. Each way from the center are two panels, each of which has two rows of keys; these keys are used to connect the console set to the talk-back speakers in the yard. These are standard, two-position, spring-return type keys, the spring-return feature being adapted to save time in operating the keys, and to prevent the possibility of keys remaining in other than the normal position when the circuit controlled is not in use. Directly above each key is a white indication lamp, which is lighted when a man in the field operates the push-button at a talk-back location, signaling the yardmaster that he wants to talk to him. A microphone is mounted on an adjustable bracket arm.



. . . the talk-back loudspeakers and the paging speakers.



Three universal problems: How to stem diversion of high rated freight traffic; how to move head end traffic at a profit; how to render satisfactory l.c.l. service without loss.—*President J. M. Hood.*

Short Line Managers Foresee Fairer Transport Policy

F. B. Whitman's plan of action gets a warm welcome at association's San Francisco convention

Defects of the National Transportation Policy and "unreasonable" delays in Interstate Commerce Commission action on requests for rate adjustments came in for strong criticism at the American Short Line Railroad Association's 39th annual convention in San Francisco, October 2 and 3.

Generally, the business outlook — as reflected by speakers and officers of the association, along with safety and labor relations reports—was one of optimism. President J. M. Hood told the more than 300 delegates that, while the level of business was somewhat lower than the preceding year, car shortage was at a minimum and the present indication is for no early severe car shortage. Deliveries of equipment and repair parts continue on a satisfactory basis, he said.

Response to the key address of Frederic B. Whitman, president of the Western Pacific, was spontaneous and significant. The speech outlined succinctly the current aims of association members, as well as those of the larger railroads. Discussion which followed Mr. Whitman's address indicated unanimity in support of the aims he outlined.

He drew laughter when he pointed out that member roads of the short line association, with only 8 per cent of the total railroad mileage of the country, account for more than 16 per cent of the total gross revenues. "In other words, you are taking in twice as much per mile as the railway industry as a whole, and I assume from this that none of you have any financial worries." However, Mr. Whitman went on in serious vein, some of the larger railroads do have financial worries and, he added, association members might be of great help to them while at the same time benefitting their own roads—largely by force of numbers.

The National Transportation Policy as laid down by Congress in the Transportation Act of 1940 is one with

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which the railroads can have no serious quarrel, except that it doesn't go far enough, the speaker said. The policy provides, among other things, for fair and impartial regulation of all modes of transportation subject to the Interstate Commerce Act. The policy, however, makes no mention of air transport because air transport is not under I.C.C. And the Civil Aeronautics Act contains no provision requiring the administration of that act by the C.A.B. to preserve the inherent advantages of other forms of transportation.

"The result, of course, has been government promotion of the air industry by preferential treatment and subsidies, regardless of the effect on other forms of transportation," said Mr. Whitman. "That is a defect in an otherwise soundly stated National Transportation Policy.

"But has the policy as stated been carried out? Quite obviously, it has not."

Eight Point Program

Mr. Whitman urged the delegates to support the following legislative action which he said could correct the situation:

(1) Elimination of unreasonable delays in I.C.C. action on requests by common carriers for rate adjustments, without prejudice to the commission's right to review and modify. Delayed hearings and slow decisions severely penalize carriers with loss of revenue. There always remains, too, the probability that in these days of inflation the new rates may be insufficient when they are authorized.

(2) Changing the I.C.C. rule of rate-making from first consideration of the effects of proposed rates on traffic volume to give suitable weight to the effects of the proposed rates on the maintenance of carrier credit.

(3) Repeal of the long-and-short haul clause as a primary step toward establishment of fair competition in the transportation business. "The long-and-short haul clause was justifiable when railroads had a transportation monopoly. It no longer is required as a means of public protection, and merely acts as an impediment to the railroads in competing with other forms of transportation.

(4) Agreement by I.C.C. to permit abandonment of a railroad line which is being operated at a financial loss, and power of appeal over state commissions which refuse to authorize such discontinuance.

(5) Require contract carriers by motor, water and air to file, adhere to, and make public the rates they actually charge.

(6) Adjustment of the agricultural products exemption to the motor carriage of farm products and fish from producing areas to primary markets.

(7) Make parcel post rates adequate to cover all costs of the service.

(8) Require all users of domestic, government-owned transportation facilities (highways, waterways and airports) to pay user charges sufficient to cover their fair share of the cost of building.

"This program of revision of federal transportation regulations," concluded Mr. Whitman, "is not only vital to the welfare and existence of your railroads and mine; it is absolutely necessary if America is to have the well integrated efficient transportation system it must have for continued growth and national defense."

The leading address fitted closely with the sentiment of the convention. This was apparent in the annual report of President Hood on its first day.

He said three important problems confront the railroad industry: First, there is the continuing diversion of high-rated freight traffic to competing forms of transportation; secondly, the problem of moving head-end traffic—primarily mail and express—at a profit; and third, how to render a satisfactory l.c.l. service without loss or at some profit. Intensified efforts, said Mr. Hood, are warranted on the part of each member line to solve these problems, separately and as a group.

ALL RE-ELECTED—

The association reelected its entire slate of officers. They are: James M. Hood, president; C. A. Miller, vice-president and general counsel; C. E. Huntley, secretary-treasurer; all of Washington, D. C.

J. P. Blanton, Atlanta, Ga.; J. H. Jester, Washington, D. C.; W. R. Grimm, Chicago—traffic managers.

J. M. Bamberger (president, Bamberger Railroad) Salt Lake City, Utah; L. C. Bruce (vice-president, Kentucky & Tennessee) Stearns, Ky.; V. M. Bushman (president, Ahnapee & Western) Green Bay, Wis.; T. H. Steffens (president, Sand Springs) Sand Springs, Okla.; D. W. Thomas (president, Chesapeake Western) Harrisonburg, Va.—regional vice-presidents.

The undeclared war in Korea, he continued, leaves much uncertainty in railroad planning, and it remains necessary for each member line to evaluate to the best of its ability what preparation needs to be made in order to meet adequately the demand for transportation in the immediate future.

Falling off of the level of business on member lines during the past year, he said, has been due in most part to the disturbance of the domestic economy by military requirements and the delay in converting to the production of military materiel. Some railroad and industrial strikes, and particularly the recent seven-week steel strike, contributed a great deal to the decrease in business.

Progress in Safety

William J. Patterson, member of the I.C.C., told the association that great progress has been made in railroad safety.

In 1918, during World War I, 3,419 railway employees were killed. In 1944, the peak year of railroad traffic during World War II, employee fatalities totaled 1,087, the largest number since 1929 when 1,428 employees were killed. For all classes of railway accidents, employee fatalities dropped to 392 in 1950. This was an all-time low for railroad records, which began in 1888. But the figure rose to 432 in 1951.

Similar conditions existed with reference to the number of employees reported as injured in railway accidents. The total for 1918 was 156,013, compared with 48,613 in 1944, and 24,266 in 1951. The 1951 figure is about 85 per cent below that of 1918. In addition, the volume of freight traffic on the railways in 1951 as measured in ton-miles was about 60 per cent greater than in 1918. The employee fatality rate per million man-hours reached an all-time low of 0.132 in 1950, and in 1951 it was 0.140, the second best record in railroad history.

"During recent years," said Mr. Patterson, "we have witnessed the rapid development and use of diesel-electric locomotives. This trend toward greater use of diesel-electric locomotives can be seen in locomotive inspections made by our inspectors during the fiscal year ended June 30, 1952. Of a total of 110,483 locomotive inspections, 45,224 were of steam locomotives and 65,259 were of locomotives other than steam. Some 6,000 steam locomotives were found defective, of which 370 were ordered withheld from service. About 6,087 locomotives other than steam were also found defective. These figures, you see, indicate that the conversion to the use

of diesel-electric locomotives does not lessen the need for continued close inspection."

More for Pensions

F. C. Squire, member of the Railroad Retirement Board, discussed amendments of the two laws administered by the board, which have resulted in large increases in the benefit rates. The effect of these changes, he said, will be to raise the amount paid out for unemployment benefits by around 40 per cent, or about $25,000,000 to $30,000,000 for an average year.

The increased cost, said Mr. Squire, will not immediately affect the one-half per cent tax now required of the railroads to support the unemployment insurance account, because the balance in this account is still well above the point at which a higher rate is required under the sliding scale provided by the 1948 amendments. It will be a few years yet before the unemployment tax rate railroads are required to pay goes up. The increase will, of course, occur sooner because of the 1952 amendments and long-range tax cost will be higher. The long-range cost of the present law is estimated at around 2.7 per cent for the law as it was prior to July 1.

Said Mr. Squire: "When you consider that the railroad retirement system is by no means yet full grown, and that the number now on the annuity rolls—500,000 men, women and children—will continue to increase for a few decades to come, the outgo is getting somewhat alarmingly close to the income from pay roll taxes of about $650,000,000. It should be borne in mind that in the future, when the payment of benefits increase to a point where they exceed the income from payroll taxes, the excess must be met from the interest on the fund and that, to date, only $2,900,000,000 has been accumulated in the fund."

He concluded by saying that no major liberalizing amendments were made to the Railroad Retirement Act for the first time in nine years. "But each time they have been added, the increases in benefits were applied to those already on the annuity rolls, who paid in taxes for only a small part of what they got. The remainder of the money has to come from somewhere, and inasmuch as the railroad retirement system is based on the principle of being selfsupporting, any liberalizations for those already on the annuity rolls means just that much more money to be taken away from the younger employees now working who will not retire for many years. It is to their own self-interest to stop these liberalizations until they get near retirement age themselves, because the grand total of money available is fixed—the $2,900,000,000 now on hand, and the 12½ per cent tax in the future. Any liberalization now made means placing a big mortgage on future income, which obviously is counter to the interests of those who are now paying taxes and are going to continue paying taxes for many years before they retire."

Resolutions Seek Equality

The association went on record as favoring:

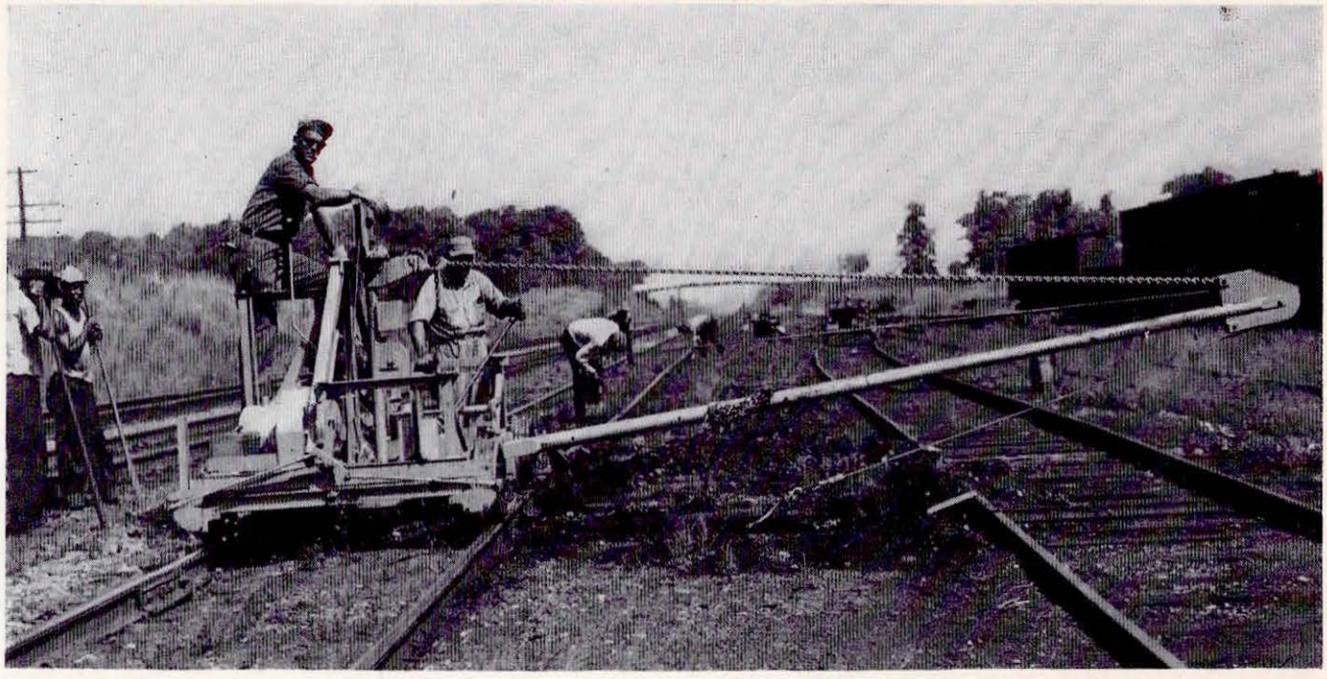
- Discontinuance of subsidies to and the equalization of the tax burden upon all forms of interstate transportation.
- Relief from financial burdens incident to the elimination of highway-grade crossings.
- Fair and equitable treatment of short line railroads regardless of ownership, possession or control.
- Abolition of Inland Waterways Corporation as a government agency, and discontinuance of barge line operations by the federal government.
- Imposition of tonnage taxes for commercial use of inland waterways.
- Eight amendments of the Interstate Commerce Act, including repeal of Section 15(4) insofar as it imposes restrictions upon the I.C.C. in establishment or maintenance of through routes or joint rates.
- Repeal of federal excise tax on transportation of persons and property.
- Regulation of practitioners before the administrative agencies of the federal government.
- Amendment of the Railway Labor Act in ten instances.
- Amendment of the Elkins Act to make clear its application to motor carriers and water carriers to the extent it now is applicable to railroads and freight forwarders.
- Amendment of Standard Time Act to fully occupy the legislative field with respect to standards of time to be observed throughout the Nation.
- Amendment of Transportation of Explosives Act in the light of developments in that field since the previous revision.
- Amendment of Railroad Retirement Act, the Railroad Unemployment Insurance Act, and the Railroad Retirement Tax Act, to make it clear that employees of contractors performing railroad work are not subject to these acts.
- An increase in parcel post rates and reductions in the sizes and weights of parcel post packages.
- Authorize the Bureau of Public Roads of the Department of Commerce to determine the portion and type of public road taxes which should be assessed against various types and weights of motor vehicles.

The association *opposed*:

- Any legislation impairing the efficiency or independence of the I.C.C.
- Any legislation increasing the expense of operation of the railroads without compensating improvement in service to the public or enhancement of safety.
- Any legislation giving, or tending to give, freight forwarders the status of carriers.
- Exclusion from the Sherman Antitrust Act of transportation agencies subject to the jurisdiction of the I.C.C., the U. S. Maritime Administration and the Civil Aeronautics Board.
- Federal control safety regulations applicable to the engineering standards of highway vehicles operated in interstate or foreign commerce.
- Any Federal Workmen's Compensation Act detrimental to the interests of its members or their employees.
- Construction of the proposed St. Lawrence Seaway and Power Project, the Missouri Valley and the Columbia Valley Projects.
- Repeal of the Reed-Bulwinkle Act.
- Establishment of a Federal Traffic Bureau, a Federal Transportation Authority, or a Federal Transportation Department.
- Giving Interstate Commerce Commission power to prescribe penalty per diem rates for use of freight cars.

The delegates also heard talks by Francis A. O'Neill, Jr., chairman of the National Mediation Board; Kenneth L. Vore, director of Military Transport Service, U. S. Department of Defense; Nelson M. Bortz, chairman of the Railroad and Airline Wage Board; and Robert L. Glenn of the National Production Authority.

The 40-mile California Western was official host to the more than 300 delegates. A total of 312 U. S. roads are now members of the association.



Although 1951 was a year of low tie-renewal records, there was more extensive mechanization of tie-renewal methods. One of the new machines in this field was the Nordberg "Gandy" shown removing a tie on a siding.

Tie Renewals at New Low in 1951

Use of untreated ties continued to decrease but a few more secondhand ties were installed than during previous year

For the first time in the history of American railroads, the five-year average of tie renewals per mile of maintained track fell below 100 at the end of 1951. This figure indicates an average service life of more than 30 years, and is said to be due, in part, to the heavy use of treated ties. In attaining this average, 1951 tie renewals on Class I railways reached a record low of 29,061,327, or 1,431,526 less than the number installed the year before. The grand total of ties installed includes 739,286 new, untreated ties (the lowest number on record); 27,938,661 new treated ties; 383,243 secondhand ties; and 137 "ties other than wood."

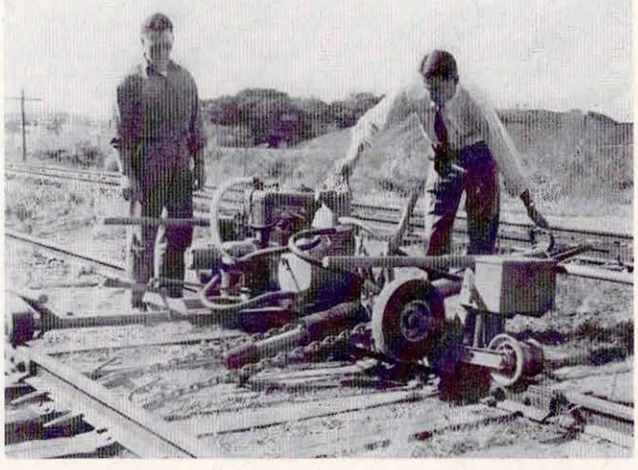
New Low in Canada, Too

A new low record was also established on Canadian roads, where installations dropped 411,357 to a total of only 6,651,320 for the year. This includes 594,007 untreated ties and 6,057,313 new treated ties. As usual Canadian roads did not install any secondhand ties or "ties other than wood."

These figures are based on the tabulation of crosstie-renewal statistics compiled for the Committee on Ties of the A.R.E.A. by the Bureau of Railway Economics of the Association of American Railroads from reports made to the Interstate Commerce Commission by Class I railroads in the United States and from figures furnished by the large Canadian roads to the A.R.E.A. Some of the more significant statistics are reproduced in the tables accompanying this article.

Not only was there a new low record established in the number of crossties installed in 1951 but also in the average number of new wood crossties renewed per mile of maintained track.

This figure for the year of 1951 dropped to an all-time low of 87, which compares with 92 in 1950 and



The Fairmont Tie Remover was another new machine seeing active service on several roads during the year. This machine is said to be capable of pushing out a tie by means of a hydraulic ram, regardless of how firmly it may be embedded in any kind of ballast.

Statistics of Crosstie Renewals on Leading Railroads in the United States and Canada for the Calendar Year Ended December 31, 1951

Road	Miles of maintained track occupied by crossties	Total number of new wood crossties laid in replacement in 1951	Number of wood crosstie renewals per mile of maintained track		Per cent of wood crosstie renewals to all ties in track		Average cost of new wood ties treated	Estimated total crossties in all maintained tracks	Equated gross ton-miles per mile of maintained track (thous.)	Cost of new wood crossties inserted per mile of maintained track	Cost of new wood crossties inserted per thousand equated gross ton-miles (cents)
			1951	5-year average	1951	5-year average					
NEW ENGLAND REGION:											
Bangor & Aroostook	819.74	115,883	141	176	4.9	6.1	$3.54	2,366,552	1,977	$305	15.40
Boston & Maine	2,759.36	143,388	52	58	1.8	2.0	3.47	8,140,112	5,193	180	3.47
Canadian Nat. Lines in New Eng.	233.54	12,463	53	85	1.7	2.7	2.31	739,756	2,608	123	4.72
Canadian Pacific (lines in Me.)	216.40	18,606	86	97	3.0	3.3	2.42	627,524	8,558	208	2.43
Canadian Pacific (lines in Vt.)	125.41	14,952	119	81	4.0	2.7	2.42	376,721	5,043	289	5.73
Central Vermont	491.87	30,463	58	51	2.0	1.8	2.84	1,458,974	4,814	165	3.43
Maine Central	1,173.38	113,864	64	107	2.1	3.6	4.02	3,509,600	3,491	230	6.59
New York Connecting	26.30	734	28	91	0.9	2.9	4.14	82,375	12,517	116	0.92
New York, New Haven & Hartford	3,557.11	98,989	28	59	0.9	1.9	3.18	11,073,617	6,075	88	1.46
Rutland	474.54	21,413	21	39	0.7	1.2	3.17	1,478,238	2,571	65	2.53
Total	9,877.65	570,755	52	75	1.7	2.4	3.32	29,853,469	4,927	158	3.20
GREAT LAKES REGION:											
Ann Arbor	402.70	49,576	123	112	4.1	3.7	3.15	1,222,094	4,143	388	9.37
Cambria & Indiana	55.85	1,131	12	35	0.4	1.2	3.61	161,079	2,345	43	1.82
Delaware & Hudson	1,349.26	143,019	106	115	3.3	3.6	3.31	4,279,968	9,635	350	3.64
Delaware, Lackawanna & Western	2,142.39	150,918	69	85	2.2	2.9	3.57	6,624,776	7,354	247	3.36
Detroit & Mackinac	270.96	62,485	231	157	7.6	5.2	3.32	817,170	1,144	703	61.47
Detroit & Toledo Shore Line	150.31	10,249	67	73	2.2	2.4	4.49	453,371	5,494	303	5.52
Erie	4,619.30	367,624	80	74	2.7	2.5	3.55	13,612,731	8,072	283	3.50
Grand Trunk Western	1,834.45	196,445	107	109	3.4	3.4	2.94	5,807,109	5,834	314	5.39
Lehigh & Hudson River	110.29	8,216	59	72	2.2	2.7	3.36	296,500	6,427	200	3.11
Lehigh & New England	238.35	26,312	110	103	3.6	3.4	3.91	721,112	3,776	432	11.44
Lehigh Valley	2,497.62	188,938	76	86	2.5	2.9	3.23	7,483,793	5,523	244	4.42
Monongahela	248.83	16,285	65	59	2.2	2.0	3.35	729,224	5,740	220	3.82
Montour	72.54	6,784	94	69	3.2	2.4	4.94	208,922	3,636	462	12.71
New York Central	20,726.83	1,317,358	63	72	2.1	2.4	3.72	63,909,367	8,172	236	2.88
New York, Chi. & St.L.(Inc.W&LE)	3,425.39	299,165	87	108	2.8	3.4	3.03	10,664,069	9,551	265	2.77
New York, Ontario & Western	669.74	32,852	49	20	1.7	0.7	1.45	1,916,163	2,268	71	3.14
New York, Susquehanna & Western	211.41	9,157	43	47	1.5	1.6	4.32	615,002	1,656	187	11.30
Pittsburgh & Lake Erie	797.29	61,686	77	98	2.5	3.2	3.29	2,439,653	6,306	254	4.03
Pittsburg & Shawmut	116.75	17,094	97	126	3.4	4.5	4.15	331,803	2,464	405	16.43
Pittsburgh & West Virginia	180.39	20,459	113	88	3.7	2.9	3.88	551,366	6,862	438	6.38
Wabash	3,159.04	270,307	86	94	2.7	3.0	3.29	9,838,482	7,597	285	3.75
Total	43,279.69	3,256,060	75	82	2.4	2.7	3.46	132,683,754	7,655	259	3.38
CENTRAL EASTERN REGION:											
Akron, Canton & Youngstown	219.69	38,927	113	135	3.8	4.6	....	648,619	3,423	362	10.56
Baltimore & Ohio	10,381.25	908,718	88	88	3.1	3.1	2.88	29,561,679	9,237	252	2.73
Bessemer & Lake Erie	487.11	29,710	61	40	2.0	1.3	4.16	1,514,646	9,652	253	2.63
Central R. R. of New Jersey	888.74	44,331	50	72	1.8	2.6	3.35	2,498,846	5,830	167	2.87
Central R. R. of Pennsylvania	459.29	21,920	48	81	1.7	2.9	3.46	1,291,375	6,694	165	2.46
Chicago & Eastern Illinois	1,355.63	68,201	50	56	1.7	1.8	3.56	3,952,999	4,875	179	3.67
Chicago & Illinois Midland	166.72	19,747	118	118	3.9	3.9	3.52	500,196	7,984	416	5.22
Chicago, Ind'polis & Louisville	726.25	158,389	218	165	7.0	5.3	2.90	2,254,932	5,187	632	12.18
Detroit, Toledo & Ironton	601.11	68,719	114	91	4.0	3.2	2.94	1,731,197	4,061	328	8.08
Elgin, Joliet & Eastern	859.30	72,509	65	66	2.1	2.2	2.90	2,642,221	4,755	189	3.98
Illinois Terminal	646.44	48,621	72	83	2.3	2.7	2.60	2,003,964	1,822	187	10.25
Long Island	780.06	80,381	103	112	3.6	3.9	3.48	2,245,469	4,940	358	7.25
Missouri-Illinois	216.59	27,669	128	195	4.1	6.2	2.56	680,210	2,043	327	16.02
Pennsylvania	21,437.49	1,721,496	80	88	2.8	3.1	3.35	61,265,869	9,606	269	2.80
Penna.-Reading Seashore Lines	592.14	36,104	61	85	2.2	3.1	3.85	1,609,810	2,428	235	9.68
Reading Co.	2,789.89	246,107	88	97	3.2	3.5	3.11	7,721,330	6,742	274	4.07
Staten Island Rapid Transit	93.18	4,162	45	61	1.7	2.4	3.75	238,541	2,246	167	7.46
Western Maryland	1,153.63	86,755	75	68	2.6	2.4	3.47	3,394,141	7,549	261	3.45
Total	43,854.51	3,682,466	83	88	2.9	3.1	3.19	125,756,044	8,401	265	3.16
POCAHONTAS REGION:											
Atlantic & Danville	226.09	25,903	115	*	3.9	*	2.81	666,094	1,479	278	18.83
Chesapeake & Ohio	8,028.04	644,836	80	84	2.6	2.8	3.11	24,351,852	11,054	250	2.26
Norfolk & Western	4,341.93	569,361	130	128	4.2	4.1	2.95	13,459,983	12,136	383	3.15
Richmond, Fred. & Potomac	412.32	35,229	81	54	2.8	1.9	3.32	1,214,600	13,408	270	2.01
Virginian	946.04	134,248	142	120	4.6	3.9	2.80	2,906,522	11,714	397	3.39
Total	13,954.42	1,409,577	100	99	3.3	3.2	3.02	42,599,051	11,350	302	2.66
SOUTHERN REGION:											
Alabama Great Southern	496.80	49,886	100	167	3.3	5.5	3.36	1,507,301	9,266	338	3.64
Atlanta & St. Andrews Bay	115.16	18,580	160	143	5.4	4.7	3.82	345,687	5,351	624	11.65
Atlanta & West Point	147.82	23,290	158	151	5.3	5.0	3.27	441,266	5,772	515	9.01
Atlantic Coast Line	7,317.39	781,749	107	162	3.5	5.3	3.33	22,333,886	5,612	354	6.32
Central of Georgia	2,305.30	353,445	153	141	5.3	4.8	2.24	6,667,913	4,513	343	7.61
Charleston & Western Carolina	423.63	99,600	235	191	7.9	6.6	3.47	1,265,671	2,762	817	29.57
Cin., New Orleans & Tex. Pac.	773.34	105,931	137	143	4.6	4.8	3.39	2,290,890	12,484	465	3.72
Clinchfield	421.31	130,633	310	264	9.9	8.6	3.16	1,322,879	12,288	978	7.96
Columbus & Greenville	204.44	28,357	139	162	4.4	5.1	2.30	647,666	1,378	319	23.16
Florida East Coast	1,153.21	136,604	117	143	4.0	4.9	3.52	3,353,630	5,905	403	6.82
Georgia	442.45	70,797	160	135	5.3	4.5	3.02	1,345,435	4,607	482	10.47
Georgia & Florida	409.54	128,448	314	241	11.6	8.9	3.42	1,105,758	1,497	456	30.45
Georgia Southern & Florida	463.86	99,299	214	210	6.8	6.7	2.77	1,460,205	4,482	534	11.90
Gulf, Mobile & Ohio	3,500.15	376,127	106	157	3.4	5.1	2.76	11,088,473	5,236	293	5.59
Illinois Central	9,840.25	1,430,437	145	167	4.8	5.5	2.58	29,982,982	7,006	374	5.34
Louisville & Nashville	6,751.47	795,154	118	117	4.1	4.1	2.71	19,306,179	7,369	319	4.34
Mississippi Central	173.93	23,588	135	144	4.2	4.5	2.54	552,481	2,143	343	16.00
Nashville, Chatt. & St. Louis	1,426.88	226,466	159	111	5.8	4.1	2.65	3,903,944	5,653	421	7.44
New Orleans & Northeastern	295.04	27,070	92	178	3.1	6.1	3.36	872,309	9,353	309	3.30
Norfolk Southern	769.92	195,519	166	210	5.7	7.2	2.80	2,260,242	2,523	387	15.32
Seaboard Air Line	5,429.87	691,365	127	155	4.2	5.1	3.04	16,406,156	6,577	387	5.88
Southern Ry.	8,456.68	865,624	102	111	3.3	3.6	3.20	26,221,568	6,322	328	5.18
Tennessee Central	342.60	45,353	132	139	4.4	4.6	2.82	1,037,393	2,172	319	14.68
Western Ry. of Alabama	188.34	34,908	185	147	6.2	4.9	3.30	563,745	5,115	611	11.95
Total	51,849.38	6,738,230	129	147	4.3	4.9	2.90	156,283,659	6,295	367	5.82

Statistics of Crosstie Renewals on Leading Railroads in the United States and Canada for the Calendar Year Ended December 31, 1951—Continued

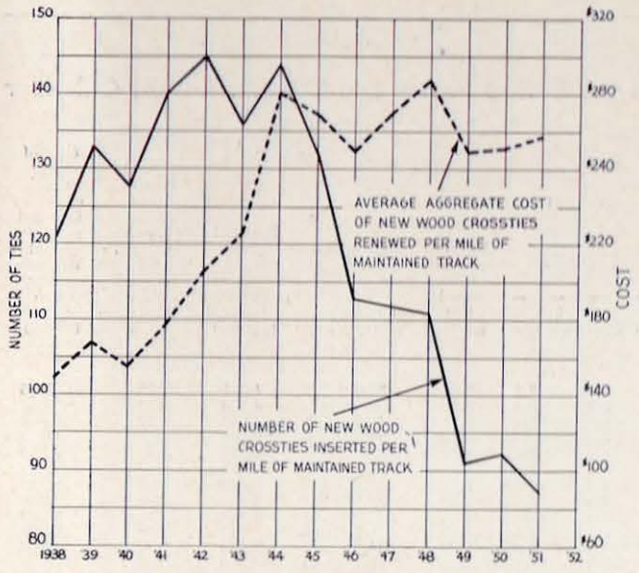
	Miles of maintained track occupied by crossties	Total number of new wood crossties laid in replacement in 1951	Number of wood crosstie renewals per mile of maintained track		Per cent of wood crosstie renewals to all ties in track		Average cost of new wood ties treated	Estimated total crossties in all maintained tracks	Equated gross ton-miles per mile of maintained track (thous.)	Cost of new wood crossties inserted per mile of maintained track	Cost of new wood crossties inserted per thousand equated gross ton-miles (cents)
			1951	5-year average	1951	5-year average					
NORTHWESTERN REGION:											
Chicago & North Western	10,970.60	964,242	88	93	3.0	3.2	$2.63	32,505,877	4,421	$228	5.16
Chicago Great Western	1,786.24	120,745	68	161	2.3	5.4	3.53	5,330,535	4,930	238	4.84
Chicago, Milwaukee, St. Paul & Pac.	13,509.25	466,586	35	74	1.1	2.4	2.71	41,659,564	4,593	77	1.67
Chicago, St. Paul, Minn. & Omaha	2,145.54	180,080	84	97	2.8	3.3	2.99	6,361,817	3,790	251	6.63
Duluth, Missabe & Iron Range	1,177.90	54,670	46	65	1.7	2.2	2.88	3,219,890	7,844	133	1.69
Duluth, South Shore & Atlantic	540.95	65,793	122	146	4.1	4.9	2.81	1,616,851	4,315	321	7.43
Duluth, Winnipeg & Pacific	205.11	25,673	125	207	4.2	7.0	2.56	604,476	5,408	312	5.76
Great Northern	10,271.88	1,113,683	108	114	3.5	3.7	3.05	31,800,791	5,975	328	5.66
Green Bay & Western	276.12	29,764	108	118	3.8	4.0	3.83	792,374	2,210	386	17.47
Lake Superior & Ishpeming	249.34	26,555	107	135	3.6	4.5	3.12	748,020	949	226	23.78
Minneapolis & St. Louis	1,541.76	235,412	153	176	5.1	5.8	2.79	4,643,075	2,667	390	14.62
Minpls., St. Paul & S. S. M.(Inc.WC)	4,817.42	468,239	97	103	3.3	3.4	2.56	14,040,849	4,419	245	5.55
Northern Pacific	9,228.02	476,713	52	60	1.8	2.1	2.71	26,788,939	4,739	140	2.96
Spokane International	175.61	66,352	378	323	13.0	11.1	3.18	511,671	1,983	804	40.55
Spokane, Portland & Seattle	1,132.48	70,833	63	97	2.0	3.2	3.30	3,623,936	5,897	142	2.42
Total	58,028.22	4,365,340	75	94	2.5	3.1	2.83	174,249,295	4,768	203	4.27
CENTRAL WESTERN REGION:											
Atchison, Topeka & Santa Fe	19,419.75	1,191,339	61	74	1.9	2.4	2.88	62,007,262	8,228	177	2.15
Chicago, Burlington & Quincy	11,823.18	754,608	58	68	1.9	2.2	2.76	36,509,980	5,748	161	2.80
Chicago, Rock Island & Pacific	9,870.25	811,085	82	87	2.8	2.9	2.51	29,477,979	5,227	206	3.94
Colorado & Southern	809.03	47,399	55	72	1.8	2.4	3.01	2,427,090	5,407	165	3.06
Colorado & Wyoming	107.05	16,379	153	59	5.2	2.0	5.05	316,673	230	773	336.15
Denver & Rio Grande Western	3,319.96	318,554	60	51	1.9	1.6	3.54	10,340,000	5,751	211	3.67
Fort Worth & Denver	957.70	60,799	63	85	2.1	2.9	3.13	2,877,172	5,753	197	3.42
Northwestern Pacific	423.83	83,035	196	162	6.8	5.6	3.12	1,227,226	4,544	602	13.25
Sacramento Northern	315.00	19,577	62	*	2.1	*	2.96	944,912	458	180	39.39
Southern Pacific Co.-Pac. Lines	12,072.06	874,844	72	78	2.4	2.5	3.21	35,876,172	10,621	231	2.18
Toledo, Peoria & Western	279.66	17,994	64	55	2.0	1.8	3.24	885,963	868	209	6.05
Union Pacific	13,376.22	528,726	40	60	1.4	2.1	3.04	37,796,591	10,923	120	1.10
Utah	70.69	3,032	19	105	0.7	3.8	4.51	200,394	4,389	69	1.58
Western Pacific	1,538.40	189,899	123	206	4.1	6.9	3.05	4,575,864	8,290	373	4.49
Total	74,382.78	4,917,270	64	75	2.1	2.6	2.93	225,463,278	8,050	186	2.31
SOUTHWESTERN REGION:											
Beaumont, Sour Lake & Western	149.90	20,495	137	172	4.6	5.5	2.97	446,300	9,886	407	4.11
International-Great Northern	1,346.21	270,739	201	155	6.4	5.1	2.84	4,256,400	6,496	571	8.79
Kansas City Southern	1,299.42	199,473	154	84	4.9	2.7	2.83	4,112,213	8,364	434	5.19
Kansas, Oklahoma & Gulf	352.56	37,043	105	89	3.5	3.0	3.40	1,047,639	5,065	357	7.06
Louisiana & Arkansas	884.26	115,301	130	94	4.0	2.9	2.82	2,879,501	5,216	367	7.04
Midland Valley	352.05	27,597	78	77	2.6	2.6	3.14	1,042,067	1,072	245	22.85
Missouri-Kansas-Texas Lines	3,923.53	297,873	76	91	2.4	2.9	2.85	12,369,200	4,767	217	4.54
Missouri Pacific	8,830.24	1,253,899	142	141	4.6	4.6	2.79	27,234,295	6,748	396	5.86
New Orleans, Texas & Mexico	227.81	50,263	221	170	7.2	5.5	2.98	696,900	7,079	658	9.30
Oklahoma City-Ada-Atoka	136.76	17,779	130	180	4.5	6.3	3.72	393,868	691	439	63.61
St. Louis, Brownsville & Mexico	776.57	91,324	118	123	3.9	4.0	2.82	2,349,100	3,686	331	8.99
St. Louis-San Francisco	5,779.83	525,672	91	119	2.9	3.8	2.67	18,188,893	5,130	243	4.74
St. Louis, San. Fran. & Texas	153.66	12,754	83	111	2.7	3.6	2.81	480,910	5,021	233	4.65
St. Louis Southwestern Lines	1,836.08	257,992	140	153	4.5	4.9	2.68	5,724,814	8,249	374	4.53
San Antonio, Uvalde & Gulf	355.91	43,129	121	113	4.2	3.9	2.80	1,026,400	2,182	340	15.57
Texas & New Orleans	5,574.97	528,595	95	108	3.4	3.9	2.46	15,346,711	6,261	234	3.73
Texas & Northern	12.41	2,377	192	*	5.0	*	2.65	47,562	3,192	507	15.89
Texas & Pacific	2,252.06	326,255	145	155	5.0	5.3	2.77	6,584,920	8,432	401	4.76
Texas Mexican	234.49	43,069	184	121	5.8	3.8	3.41	742,864	1,043	627	60.09
Total	34,478.72	4,121,629	119	123	3.9	4.1	2.76	104,970,557	6,127	329	5.37
Grand Total—United States	329,705.37	29,061,327	87	99	2.9	3.3	2.99	991,859,107	7,036	257	3.65
CANADIAN ROADS:											
Canadian National	27,874.00	3,655,985	131	139	4.5	4.8	2.41	81,359,130	*	302	*
Canadian Pacific	21,249.60	2,793,252	131	140	4.6	4.9	2.31	60,976,687	5,098	301	5.91
Ontario Northland	679.70	202,083	297	254	10.3	8.9	2.83	1,971,130	2,521	626	24.35

*Not reported.

91 in 1949. For roads in Canada, the comparable average decreased from 142 in 1950 to 134 in 1951. The new low annual average of 87 established by Class I roads in 1951 was just low enough to bring the five-year average of tie renewals per mile of maintained track down to 99, the first average below 100 in history.

Of the 126 roads reporting, 69 showed a decrease in average tie renewals per mile of maintained track in 1951: three roads installed ties at the same rate as in 1950; and the remainder (54) stepped up their installation rate.

The eight roads that made the greatest reduction in tie renewals per mile of maintained track included the Chicago Great Western (217 to 68); the Missouri-Illinois (194 to 128); the New York Connecting (91 to 28); the Oklahoma City-Ada-Atoka (189 to 130); the New Orleans & Northeastern (141 to 92); the Duluth, Winnipeg & Pacific (173 to 125); the Alabama


NUMBER OF TIES
COST
AVERAGE AGGREGATE COST OF NEW WOOD CROSSTIES RENEWED PER MILE OF MAINTAINED TRACK
NUMBER OF NEW WOOD CROSSTIES INSERTED PER MILE OF MAINTAINED TRACK
1938 39 40 41 42 43 44 45 46 47 48 49 50 51 52

The average number of crossties renewed per mile of maintained track dropped in 1951 to 87, the lowest of record. At the same time, the average cost of ties inserted per mile of track rose to $257, but not to a new record.

Great Southern (147 to 100); and the Norfolk Southern (210 to 166).

The Cambria & Indiana renewed an average of only 12 crossties per mile of maintained track in 1951, thereby becoming the railroad with the lowest average in the United States. Other roads with low averages in 1951 included the Rutland (21); the New York Connecting (28); the New York, New Haven & Hartford (28); and the Milwaukee (35). The Cambria & Indiana also led this group in 1950, at which time the Milwaukee was second with an average of 23 and the Rutland was fourth with an average of 32.

The railroad with the lowest five-year average of new tie renewals per mile for the period ending in 1951 was

A third machine—the Woolery tie-end remover—was first offered to railroads in 1951 as a unit to supplement the Woolery Tie Cutter. The cutter saws a tie into three pieces. The middle portion between the rails is removed and the hydraulic cylinder of the new machine, lowered into the hole thus made, pushes the ends of the cut tie outward.

NEW LOW RECORDS ESTABLISHED IN 1951

UNITED STATES (Class I)	
Grand total wood ties installed	29,061,327
Untreated ties installed	739,286
Average annual renewals, new ties per mile	87
Five-year average, new ties per mile	99
CANADA	
Grand total	6,651,320

the New York, Ontario & Western (20). This low average was attained by this road by virtue of its having installed no new crossties in the years 1947, 1948, and 1949. During that time its needs for crossties were filled by the use of secondhand ties obtained from the abandonment of second main track. During 1951 other low averages were reached on the Cambria & Indiana (35); the Rutland (39); the Bessemer & Lake Erie (40); the New York, Susquehanna & Western (47); and the Denver & Rio Grande Western (51).

Installation Reduction in 1951

That 1951 was a year of generally reduced installation of crossties is evident from the fact that of the eight regions by which the railroads of the United States are grouped, only one failed to show a reduction in new ties renewed per mile of track maintained, as compared with the year before. However, even in that region (the Southern) the figure did not show an increase but merely remained exactly the same as the year before (129). The New England region made the greatest average reduction (76 to 52). Other regions making reductions included the Great Lakes (78 to 75); the Central Eastern (91 to 83); the Pocahontas (101 to 100); the Northwestern (77 to 75); the Central Western (70 to 64); and the Southwestern (124 to 119). As reported above, the average for the country as a whole was reduced from 92 to a new low of 87 during the year.

During 1951, a total of 83 roads in the United States reported using treated ties exclusively in maintenance. The number of roads in this category in each of the previous 10 years was 79 in 1950, 75 in 1949, 72 in 1948, 66 in 1947, 63 in 1946, 56 in 1945, 54 in 1944, 45 in 1943, and 49 in both 1942 and 1941. Only one road reported not using any treated ties at all. Of the roads using both treated and untreated ties, only six (one of them being in Canada) reported using more untreated than treated ties.

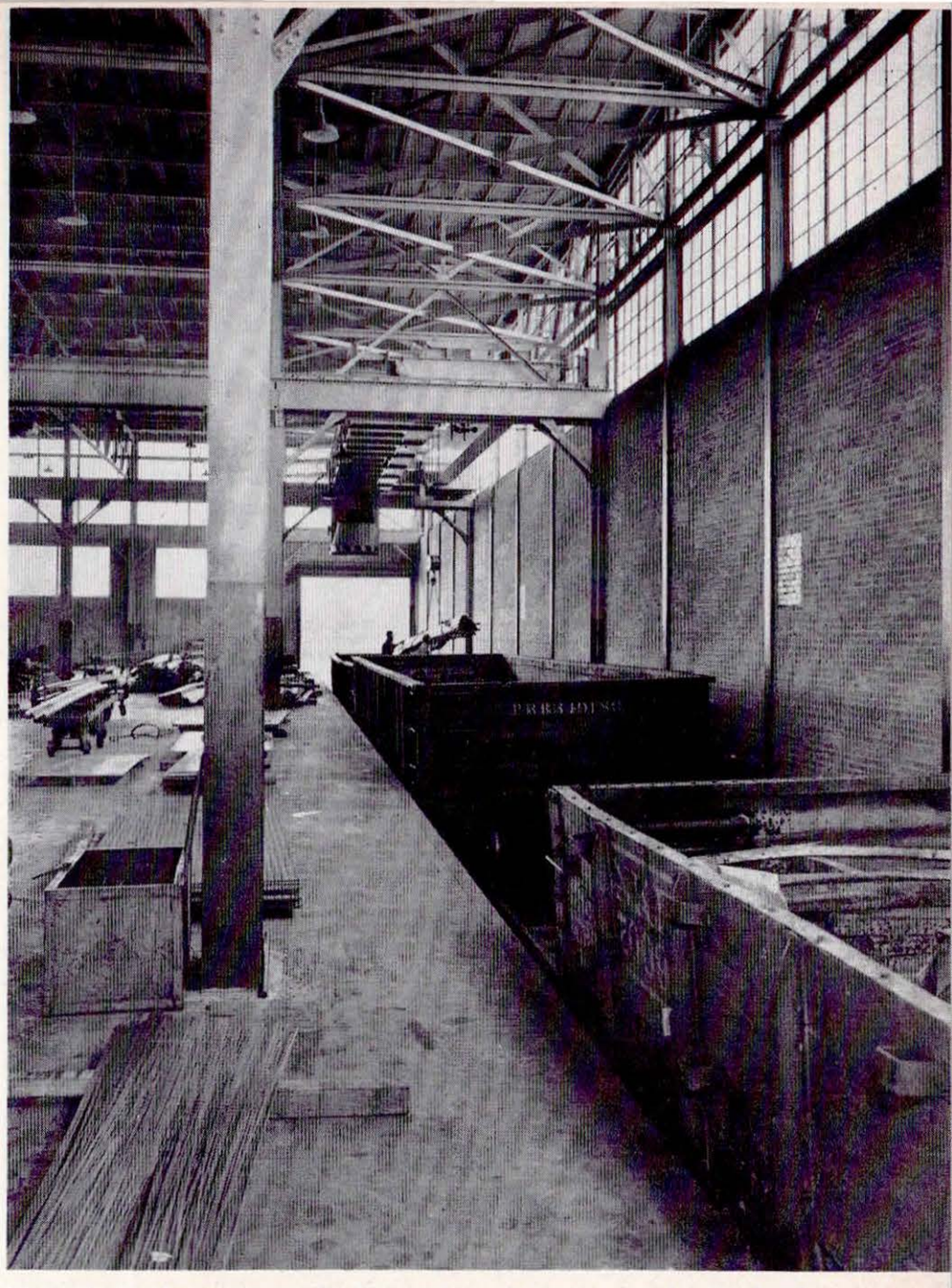
"Treated" Ratio Down Slightly

The ratio that treated wood ties bear to the total ties renewed in the United States dropped slightly from the high of 96.4 per cent in 1950 to 96.2 per cent in 1951. This compares to 95.3 per cent in 1949, 95.1 per cent in 1948, 94.7 per cent in 1947, 94.3 per cent in 1946, and 94 per cent in 1945. For Canada, the comparable ratio rose from 88.4 in 1950 to 91.1 in 1951.

The average storekeepers' prices of individual crossties rose from $1.50 for new, untreated ties in 1950 to $1.53 in 1951. For new, treated ties the average cost rose from $2.79 in 1950 to $2.99 in 1951, while that for all new wood ties increased from $2.75 to $2.95.

As shown in the accompanying table these statistics cover a total of 329,705.37 miles of maintained track in the United States and 49,803.30 miles in Canada. These mileages compare with 329,927.45 miles in the United States and 49,703.20 miles in Canada in 1950.

Dirty cars, "bad orders" and pace of new car orders hold spotlight at annual meeting in St. Louis



"It is almost always cheaper for the consignee to clean a car, for he already has a labor force at work taking out the revenue load. Removal of dirt, dunnage and debris should be a simple continuation of that unloading process."—James K. Knudson, defense transport administrator and Interstate Commerce Commissioner.

Car Supply—Number One Worry Of National Shippers Boards

With an eye to growing civilian population, as well as the advent of expanded mobilization—or even sudden, all-out war—members of the National Association of Shippers Advisory Boards, meeting in St. Louis on October 7, 8 and 9, devoted much of their program to analyzing the car supply picture and finding means to brighten it.

The railroads' side of this picture was presented to the shippers by William T. Faricy, president of the Association of American Railroads; by James H. Aydelott, vice-president of the Operations and Maintenance Department of the A.A.R.; and by Arthur H. Gass, chairman of the A.A.R.'s Car Service Division. The "third side of the street"—that of the federal government—was presented by James K. Knudson, defense transport administrator and member of the Interstate Commerce Commission. All were in agreement that more intensive use of cars now in service was a basic objective—one which shippers and carriers can work out to their mutual benefit. And the dirty car problem was

Frank H. Cross
Retiring president

Arthur P. Little
New president

John N. Lind
Vice-president

C. L. Denk, Jr.
Vice-president

NEWLY ELECTED OFFICERS

President: Arthur P. Little, general traffic manager, Dennison Manufacturing Company, Framingham, Mass.

Vice-President: John N. Lind, general traffic manager, National Supply Company, Pittsburgh, Pa.

Vice-President: C. L. Denk, Jr., general traffic manager, Fulton Bag & Cotton Mills, Atlanta, Ga.

Secretary: J. W. Witherspoon, assistant general traffic manager, U. S. Rubber Company, Los Angeles, Cal.

Retiring President: Frank H. Cross, assistant director of traffic, General Mills, Inc., Minneapolis, Minn.

generally conceded to be a most fruitful field for improvement. A reduction in number of cars awaiting repairs, and, to a lesser extent, fewer delays in terminals, were also cited as ways to meet the problem.

Stating that "this is no time for business as usual," Mr. Knudson, speaking at a joint luncheon session at which members of the Traffic Club of St. Louis were also present, said the dirty car problem "has been with us so long it has begun to take on the aspect of an Augean stable." It is a three-fold problem, he said, because it costs money; results in extensive inefficiency in use of freight cars; and discriminates against the tidy shipper.

He denied "categorically" that cleaning cars was a sole and fixed railroad responsibility "especially in this time of national defense emergency and tight car supply." He added that "there can be no escape from the hard fact that regardless of who actually performs or pays the cost of cleaning, the user of freight service, in the long run, actually pays the bill—either directly, or through higher freight rates."

Mr. Knudson felt that the practice of having local freight agents report consignees releasing dirty cars did not get at the "grass roots" of the problem because of natural reluctance of an agent to "turn in" a good customer, and because of the hesitation of railroad management to take action which might divert traffic to competitors. Offering his assistance in this problem to the national board and to the 13 regional boards, Mr. Knudson quickly added that he believed government should avoid interference with private business "except to the extent intervention is absolutely necessary," and that, even in the regulatory field, "government should assert its authority only where private business organizations do not individually, or cannot as a group, accomplish the best lawful results."

Pointing out that a war must be fought with railroad equipment available at its outbreak, he said 146,000 more cars must be ordered as soon as possible to attain a July 1954 goal for handling heavy mobilization. Almost double that number, he added, would be necessary to handle traffic generated by a full scale war. "I have had no assurance that these orders will be forthcoming. I hope the railroads will reconsider, for I have been assured that materials will be furnished for a larger program beginning with the second quarter of 1953."

Mr. Faricy's Answer

Following Mr. Knudson on the luncheon program, Mr. Faricy said the railroads have on order enough cars to keep builders busy for at least a year at the present rate of production. "The amortization allowance program, which has had such wholehearted and effective support from Mr. Knudson, has been, and is, a real stimulant in that connection." He said that, assuming continuation of that program, "I am confident that when the steel supply situation improves, and more liberal allocations become available, the output of cars will go up and additional car orders will be forthcoming."

Later, speaking of "the shipper-railroad team" and how cooperation has enabled intensified use of the freight car fleet, Mr. Faricy suggested a look back to 1929, the peak pre-war year, when loadings ran to a million cars a week. In that year, he said, 2,610,000 freight cars (of all ownerships) turned out 447 billion revenue ton-miles of freight service. In 1951, while the number of cars had gone down to 2,046,000, the transportation output went up to 647 billion ton-miles. "This is a gain of 85 per cent in the transportation output of the average freight car. It is partly due to the railroads having spent almost $4 billion for new and better freight cars (with an average capacity of nearly 53 tons as against 46 tons in the 1929 car); it is due, in part, to $3 billion spent for new and better locomotives to move more freight faster; it is due to $5½ billion spent on better tracks and terminals, better shops and signals, better facilities of every kind; and it is due to better operating methods made possible by these vast investments. But it is also due to another factor—the continued and increasing teamwork, both among railroads and between railroads and shippers, working together for more efficient and economical transportation. This

organized teamwork has been tested through nearly three decades of varying conditions."

During the general business sessions, several shippers openly questioned railroad policies with respect to car department layoffs during the recent steel strike. "If it was known that the cars would be needed as soon as the strike was over, why weren't repair gangs kept busy with materials on hand?" asked one shipper. Mr. Aydelott explained that while some roads did have budgetary considerations, carshop annual vacations are usually scheduled to encompass the July 4 holiday and most railroads faced the choice of putting the men back to work only until steel on hand was exhausted, or extending the vacation long enough to permit the steel supply pipeline to become recharged. Either way, he said, the net result would have been about the same. Mr. Gass supplemented this statement by pointing out that some 21,000 cars were actually repaired in July and 26,000 more in August, despite a tight supply of steel for parts.

Turning to the subject of less-carload freight, Mr. Aydelott said highways had affected volume of this traffic in an unseen way—by driving many businesses in smaller towns completely out of operation. Today, instead of freight going to such merchants in less-carload lots, it is, in many instances, going in carload lots to warehouses for ultimate distribution to the consumer by truck. Thus, he said, the actual loss of this traffic may be less than is apparent.

As to railroads' interest in retaining l.c.l. traffic, one need only look at the investment in freighthouse modernization, he continued. He explained that many older freighthouses did not lend themselves to mechanization, and that entirely new facilities were often required to continue and improve the service.

Wider Jurisdiction for Boards

In his report as retiring president of the N.A.S.A.B., Frank H. Cross, assistant director of traffic of General Mills, Inc., suggested that future activities of the national board, as well as of the regional boards, should be broadened to encompass national policy, legislative questions affecting transportation, and matters affecting transportation indirectly:

"With a membership of nearly 25,000, representing both large and small industries, we have a far-flung framework for disseminating information, probably larger than any organization in transportation today except the carriers themselves.

"Possibly this organization should advocate user charges on subsidized, or partly subsidized transportation systems, such as waterways, highways and airways. Undoubtedly the organization should investigate and give consideration to the possibility of consolidation of railway facilities where transportation services will be improved and economies affected. This organization should give serious consideration to the question of consolidation of economic regulatory functions for all forms of carriers. We should be interested, and actively participate in an effort to see that the budget for the I.C.C. is adequate for the expenses of running their organization. Particularly should we be vitally concerned, and oppose both individually and collectively, any and all legislation which would encourage public ownership of basic industry, remembering the railroads would be the first to fall under government ownership if the trend continues to go that way.

"With our vast membership and extensive coverage, we have a basis for public relations work in acquainting the general public with transportation matters and legislation affecting transportation. This is an untapped reservoir of strength and energy that should be used either in direct action, or to supplement the initial efforts of other organizations."

He added, however, that the advisory boards are fundamentally "front line troops" fighting the daily car supply problems with no money, dues or paid officers. "We are the working man's organization, in there pitching every day to keep things moving, without publicity and with no thought of personal reward except the satisfaction of performing a vital service. Let's continue this service as our primary duty."

Ask Further L.C.L. Study

Chairmen of the l.c.l. committees of the 13 regional boards, meeting with 16 carrier representatives on October 7, issued a report that was presented by Arthur P. Little, general traffic manager of the Dennison Manufacturing Company and vice-president of the N.A.S.A.B. In summary, the report quoted the shippers as feeling that l.c.l. would not return to the rails without free pick-up and delivery service (or an allowance therefor). Nor would it return, even if all service problems were fully met, if rates were not brought down to truck level. The shippers avowed they would not give up the privilege of routing unless it was clearly understood this would improve service and channel freight via the best service routes.

The group asked that the A.A.R. be requested to designate a new committee to study the advisability of adopting a single agency for all l.c.l. freight "within the operating framework and utilizing the existing pooling rights of the Railway Express Agency, or adopting one or a combination of various other proposals which have been before the boards in an endeavor to solve the serious l.c.l. problem."

The report also stated that l.c.l. solicitors often do not know their own service and that many railroads do not distribute changes in schedules often or widely enough.

In his report on the national freight car situation, John W. Lind, general traffic manager of the National Supply Company and a vice-president of the N.A.S.A.B., said it was the consensus of individual boards that over-the-road service has shown a marked improvement.

But he was critical of the car repair program, saying that the car fleet "could be quickly increased if the carriers would really get behind the program."

Reporting on the association's National Management Committee for Perfect Shipping Month, Chairman R. H. Easterling, traffic manager of the Brown Paper Mill Company, paid tribute to *Railway Age* and other periodicals for their support of the campaign. He said it would be "the height of unwisdom" to abandon the campaign. But, he pointed out: "If we are honest with ourselves, we will admit that our observation at claim prevention meetings usually indicates that those present are preponderantly men already keenly aware of the loss and damage problem and at work on its solution. The very people most likely to be helped by the discussions at those meetings are those who aren't there."

By resolution, the N.A.S.A.B. asked the railroads to reactivate their carbuilding program of 10,000 cars a month and asked authorities in Washington, D. C., "to provide adequate steel to assure that production, and an additional supply for repair of idle cars." The association felt that the "high percentage of cars awaiting repairs denotes a failure of the carriers to maintain an adequate repair program."

Another resolution outlined responsibilities of shippers and of carriers toward conserving the present car fleet through higher utility and greater care in handling. A third resolution expressed "appreciation of the recurring assistance and support of Mr. Gass and his associates in the A.A.R., in the mutual problems which are the common effort of carriers and shippers alike."

Omaha, Neb., was selected as the site of the next annual meeting, to be held October 6, 7, and 8, 1953.

Seven Months' Purchases Total $1,407,586,000

Purchases of all types of materials by domestic railroads during the first seven months of 1952 called for expenditures of $1,407,586,000. During the comparable period of 1951 the value of materials purchased by railroads in this country, including orders for equipment, totaled $2,029,472,000.

In all categories except crossties, purchases during this year's first seven months have fallen behind 1951, as shown in an accompanying table. Commitments for purchases of railroad cars and locomotives from last January 1 through July amounted to $310,599,000, a decline of $398,564,000 below equipment commitments in the same period of 1951.

July 1952 equipment commitments alone called for expenditure of $20,775,000 for 1,536 freight-train cars, six passenger cars and 72 diesel units.

1952 RAILWAY PURCHASES*

	July (000)	Seven Months Totals 1952 (000)	Seven Months Totals 1951 (000)
Equipment**	$20,775	$310,599	$709,163
Rail	499	42,018	60,085
Crossties	9,549	64,688	50,089
Other Material	83,120	684,061	837,414
Tot. from Manufacturers	$113,943	$1,101,366	$1,656,751
Fuel	33,365	306,220	372,721
Grand Total	$147,308	$1,407,586	$2,029,472

*Subject to revision.
**Amount placed on order.

JULY* PURCHASES OF MANUFACTURED GOODS (EXCL. EQUIP. & FUEL)

July '52 Compared to Other Julys (000)

Year	Amt.	% Change
1946	$ 82,185	+ 13
1947	105,869	— 12
1948	110,457	— 16
1949	91,906	+ 1
1950	91,782	+ 2
1951	135,064	— 31
1952	93,168	

July '52 Compared to Other Months '52 (000)

Month	Amt.	% Change
Jan.	$118,665	— 21
Feb.	112,532	— 17
Mar.	122,487	— 24
Apr.	121,589	— 23
May	116,482	— 20
June	105,844	— 12
July	93,168	

Seven Months Totals '52 And Other Years (000)

Year	Amt.	% Change
1946	$540,509	+ 46
1947	711,263	+ 11
1948	760,456	+ 4
1949	730,767	+ 8
1950	605,278	+ 31
1951	947,588	— 17
1952	790,767	

*JULY PURCHASES OF RAIL

July '52 Compared to Other Julys (000)

Year	Amt.	% Change
1946	$5,670	— 91
1947	8,024	— 94
1948	7,143	— 93
1949	11,021	— 95
1950	9,884	— 95
1951	8,831	— 94
1952	499	

July '52 Compared to Other Months '52 (000)

Month	Amt.	% Change
Jan.	$8,230	— 94
Feb.	7,279	— 93
Mar.	8,049	— 94
Apr.	7,310	— 93
May	6,879	— 93
June	3,772	— 87
July	499	

Seven Months Totals '52 And Other Years (000)

Year	Amt.	% Change
1946	$29,866	+ 41
1947	49,683	— 15
1948	52,186	— 19
1949	68,259	— 38
1950	58,506	— 28
1951	60,085	— 30
1952	42,018	

JULY* PURCHASES OF CROSSTIES

July '52 Compared to Other Julys (000)

Year	Amt.	% Change
1946	$7,851	+ 22
1947	8,535	+ 12
1948	7,621	+ 25
1949	7,239	+ 32
1950	4,233	+126
1951	8,436	+ 13
1952	9,549	

July '52 Compared to Other Months '52 (000)

Month	Amt.	% Change
Jan.	$8,479	+ 13
Feb.	7,995	+ 19
Mar.	10,365	— 8
Apr.	9,585	—
May	9,829	— 3
June	8,886	+ 7
July	9,549	

Seven Months Totals '52 And Other Years (000)

Year	Amt.	% Change
1946	$50,428	+ 28
1947	57,092	+ 13
1948	42,869	+ 51
1949	53,013	+ 22
1950	31,891	+103
1951	50,089	+ 29
1952	64,688	

*Subject to revision.

JULY* PURCHASES OF OTHER MATERIAL

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)			Seven Months Totals '52 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1946	$68,664	+ 21	Jan.	$101,956	— 18	1946	$460,215	+ 49
1947	89,310	— 7	Feb.	97,258	— 15	1947	604,488	+ 13
1948	95,693	— 13	Mar.	104,073	— 20	1948	665,401	+ 3
1949	73,646	+ 13	Apr.	104,694	— 21	1949	609,495	+ 12
1950	77,665	+ 7	May	99,774	— 17	1950	514,881	+ 33
1951	117,797	— 29	June	93,186	— 11	1951	837,414	— 18
1952	83,120		July	83,120		1952	684,061	

*Subject to revision.

JULY* PURCHASES OF FUEL

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)			Seven Months Totals '52 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1946	$50,270	— 34	Jan.	$52,837	— 37	1946	$305,349	——
1947	49,404	— 32	Feb.	48,917	— 32	1947	379,260	— 19
1948	68,011	— 51	Mar	50,770	— 34	1948	486,149	— 37
1949	37,104	— 10	Apr.	43,364	— 23	1949	366,529	— 16
1950	42,971	— 22	May	38,175	— 13	1950	331,865	— 8
1951	43,981	— 24	June	38,792	— 14	1951	372,721	— 18
1952	33,365		July	33,365		1952	306,220	

JULY* TOTAL PURCHASES (EXCL. EQUIP.)

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)			Seven Months Totals '52 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1946	$132,455	— 4	Jan.	$171,502	— 26	1946	$ 845,858	+ 30
1947	155,273	— 19	Feb.	161,449	— 22	1947	1,090,523	+ 1
1948	178,468	— 29	Mar.	173,257	— 27	1948	1,246,605	— 12
1949	129,010	— 2	Apr.	164,953	— 23	1949	1,097,296	——
1950	134,753	— 6	May	154,657	— 18	1950	937,143	+ 17
1951	179,045	— 29	June	144,636	— 13	1951	1,320,309	— 17
1952	126,533		July	126,533		1952	1,096,987	

JULY* INVENTORIES OF RAIL

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
July 1, 1946	$22,716	+ 77	Jan. 1	$41,981	— 4
1947	26,536	+ 51	Feb.	46,153	— 13
1948	30,837	+ 30	Mar.	48,289	— 17
1949	36,486	+ 10	Apr.	48,027	— 16
1950	37,542	+ 7	May	45,234	— 11
1951	37,821	+ 6	June	43,456	— 8
1952	40,132		July	40,132	

JULY* INVENTORIES OF CROSSTIES

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
July 1, 1946	$76,000	+ 46	Jan. 1	$104,090	+ 7
1947	88,686	+ 25	Feb.	104,057	+ 7
1948	82,143	+ 35	Mar.	108,124	+ 3
1949	96,167	+ 16	Apr.	115,100	— 3
1950	90,779	+ 23	May	113,417	— 2
1951	90,524	+ 23	June	111,967	— 1
1952	111,228		July	111,228	

JULY* INVENTORIES OF OTHER MATERIAL

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
July 1, 1946	$456,505	+ 48	Jan. 1	$683,203	— 1
1947	553,228	+ 22	Feb.	695,555	— 3
1948	610,025	+ 11	Mar.	695,614	— 3
1949	623,281	+ 8	Apr.	693,504	— 3
1950	520,334	+ 30	May	694,178	— 3
1951	669,550	+ 1	June	688,278	— 2
1952	675,832		July	675,832	

JULY* INVENTORIES OF SCRAP

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
July 1, 1946	$11,036	+ 68	Jan. 1	$22,374	— 17
1947	9,239	+101	Feb.	20,099	— 8
1948	14,210	+ 30	Mar.	19,332	— 4
1949	16,535	+ 12	Apr.	19,348	— 4
1950	13,045	+ 42	May	18,652	— 1
1951	18,221	+ 2	June	18,329	+ 1
1952	18,531		July	18,531	

JULY* INVENTORIES OF FUEL

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
July 1, 1946	$44,691	+ 32	Jan. 1	$57,842	+ 2
1947	56,565	+ 5	Feb.	57,957	+ 2
1948	83,946	— 30	Mar.	59,540	— 1
1949	81,567	— 28	Apr.	60,435	— 2
1950	49,112	+ 20	May	63,492	— 7
1951	63,944	— 8	June	58,531	+ 1
1952	59,130		July	59,130	

JULY* TOTAL INVENTORIES†

July '52 Compared to Other Julys (000)			July '52 Compared to Other Months '52 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
July 1, 1946	$610,948	+ 48	Jan. 1	$909,490	— 1
1947	734,254	+ 23	Feb.	923,821	— 2
1948	821,161	+ 10	Mar.	930,899	— 3
1949	854,036	+ 6	Apr.	936,414	— 3
1950	710,812	+ 27	May	934,973	— 3
1951	880,060	+ 3	June	920,561	— 2
1952	904,853		July	904,853	

*Subject to revision.

†All total inventory figures taken from I.C.C. statement M-125 for the month indicated.

(*Continued from page* 18)
and general counsel, replacing **W. F. Peter,** who has retired. Mr. Peter will continue as special counsel and a member of the board of directors.

John M. Spann, assistant to freight traffic manager of the CHICAGO, ROCK ISLAND & PACIFIC, has been appointed assistant to president at Fort Worth, Tex., a new position to be created effective November 1.

J. B. Edens has been elected president of the APACHE at McNary, Ariz., and **J. E. Clifford II,** has been elected first vice-president.

FINANCIAL, LEGAL & ACCOUNTING

Cadwallader J. Collins has been appointed assistant general solicitor of the NORFOLK SOUTHERN at Norfolk, Va., succeeding **Albert S. Holtz,** deceased.

R. W. Rehfeld, treasurer of the APACHE, has been elected also assistant secretary at McNary, Ariz.

OPERATING

As reported in *Railway Age* October 6, page 137, **Curtis D. Buford** has been appointed superintendent of the St. Lawrence, Ottawa and Adirondack divisions of the NEW YORK CENTRAL at Watertown, N. Y. Mr. Buford, who is 32 years old, was graduated from Massachusetts Institute of Technology and joined the NYC in 1946 as a

Curtis D. Buford

traveling car agent at New York. He was appointed assistant trainmaster at Cleveland in 1947 and, after serving as assistant to vice-president at New York, became trainmaster there in 1948 and at Buffalo in 1950. Mr. Buford was named assistant superintendent of freight transportation at Indianapolis in 1951 and early this year became assistant superintendent at Erie, Pa.

Charles B. Schlegel, terminal trainmaster of the CENTRAL OF NEW JERSEY, has been appointed assistant superintendent of the Central division, with headquarters as before at Jersey City, N.J., succeeding **Joseph J. Galuppo,** who has been named assistant superintendent of the CENTRAL OF PENNSYLVANIA, a CNJ subsidiary, at Allentown, Pa. Mr. Galuppo succeeds **Thomas P. Phillips,** who has been appointed trainmaster of the NEW YORK & LONG BRANCH and the Southern division of the CNJ at Long Branch, N.J. Mr. Phillips replaces **Alex E. Bjorkner,** who has been named assistant superintendent of transportation of the CNJ at Jersey City. **William J. Flatley,** pier manager of the CNJ, has been appointed terminal trainmaster, with headquarters as before at Jersey City, succeeding Mr. Schlegel.

Carl Purkins has been elected trainmaster of the APACHE at McNary, Ariz.

TRAFFIC

R. R. Luddecke, Jr., has been appointed general agent of the FORT WORTH & DENVER at Houston, Tex., succeeding **John P. Heavers,** who has resigned.

J. T. Jones, commercial agent of the ATLANTIC COAST LINE at New Orleans, has been appointed general agent at St. Louis.

A. J. Bouchonville, general freight agent of the ELGIN, JOLIET & EASTERN, has been appointed assistant traffic manager, with headquarters as before at Chicago. **F. W. Bittner,** assistant general freight agent, has been appointed general freight agent. **G. E. Gnadt** and **H. R. O'Brien** have been appointed assistant general freight agents.

Robert Marvin Nelson has been appointed industrial consultant for the CENTRAL OF GEORGIA and the SAVANNAH & ATLANTA, to assist in the Eastern territory. Mr. Nelson was chairman of the board of the S&A until its purchase by the CofG in 1951.

Arthur W. Lewis, commercial agent of the SOUTHERN, has been appointed district freight and passenger agent, with headquarters as before at Pittsburgh, succeeding **Hugh E. Hamilton,** who has retired after more than 36 years of service with the Southern System.

James B. Gregory, engineer of the Virginia division of the SEABOARD AIR LINE at Raleigh, N. C., has been appointed general industrial agent at Norfolk, Va.

MECHANICAL

Carl J. Oldenbuttel, assistant to president of the ATLANTIC COAST LINE, has been appointed assistant general superintendent motive power and equipment, with headquarters as before at Wilmington, N.C. **Wythe D. Quarles, Jr.,** master mechanic at Waycross, Ga., has been appointed superintendent motive power of the Northern division at Rocky Mount, N.C. **Ernest D. Barnett,** acting master mechanic at Waycross, has been named master mechanic there, replacing Mr. Quarles. **Harry J. Stein,** chief mechanical engineer, has been appointed assistant to general superintendent motive power and equipment, with headquarters as before at

Carl J. Oldenbuttel

Wilmington. Mr. Oldenbuttel, a native of Wilmington, began his railroad career as a messenger boy with the ACL on April 12, 1912, subsequently serving as clerk in the office of the auditor of disbursements. He then held the following positions in the office of the general superintendent motive power and equipment: clerk, assistant chief clerk, chief clerk, mechanical accountant and assistant to chief of motive power and equipment. Mr. Oldenbuttel was appointed assistant to president on October 1, 1950.

Mr. Quarles was born at Richmond, Va., and attended the University of North Carolina. He entered the service of the ACL as a fireman at Rocky Mount on November 15, 1937, and subsequently served as engineer, fireman instructor, assistant road foreman of engines, road foreman of engines and trainmaster. He was named superintendent of terminals at Richmond in February 1950 and on January 1, 1951, he was promoted to master mechanic at Waycross.

C. R. Smith, master mechanic of the Memphis division of the MISSOURI PACIFIC, and also master mechanic of the UNION RAILWAY OF MEMPHIS, has retired after 41 years of service. He has been succeeded by **C. H. McAmis,** master mechanic at Monroe, La., who, in turn, has been succeeded by **E. M. Vandiver,** master mechanic at Kansas City, Mo. Mr. Vandiver has been succeeded by **A. J. Daniel.**

E. L. Hyatt, master mechanic of the BOSTON & ALBANY, at Boston, has been appointed master mechanic of the NEW YORK CENTRAL, Lines Buffalo and East at Harmon, N.Y., succeeding **F. E. Edwards,** who has been appointed as-

sistant master mechanic at Harmon. Mr. Edwards succeeds **D. D. Ferris,** who has been named terminal foreman at Harmon, replacing **V. Gagliardi. J. J. Wright,** assistant master mechanic at Collinwood, Ohio, has been appointed master mechanic of the B&A at Boston, replacing Mr. Hyatt.

PURCHASES & STORES

J. E. Batie has been elected purchasing agent of the APACHE at McNary, Ariz.

K. A. McDonnold has been appointed assistant purchasing agent of the KANSAS CITY SOUTHERN, at Kansas City, Mo.

ENGINEERING AND SIGNALING

As reported in *Railway Age* October 6, page 141, **J. C. Williams** has been named engineer of buildings of the SEABOARD AIR LINE at Norfolk, Va. Mr. Williams was graduated from North Carolina State College (C.E.) and entered the service of the Seaboard at Norfolk in 1916 as a draftsman. He

J. C. Williams

was promoted to chief draftsman in 1920, engineer of buildings in 1926 and engineer of structures in 1943. In the following year Mr. Williams was named office engineer in the consolidated engineering department of the Seaboard and in 1948 became assistant engineer of buildings.

J. H. Estes has been appointed assistant to the chief engineer of the KANSAS CITY SOUTHERN at Kansas City, Mo.

SPECIAL

Bernard A. Allen, manager of British Columbia district and coastal steamship services of the CANADIAN NATIONAL at Vancouver, B.C., has retired. He has been succeeded by **J. J. Behan,** former general superintendent of transportation at Winnipeg.

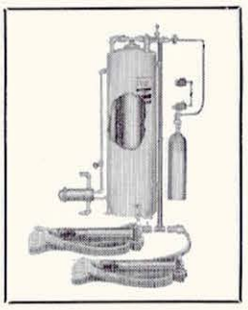
Mr. Allen's early career embraced car ferry terminal, shipbuilding, and ship repairs throughout the Canadian

Pyrene AIR FOAM

protects railroads four ways

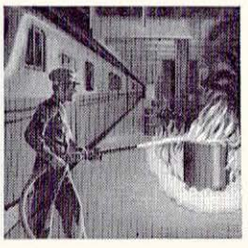
Diesel Locomotives

Specially designed system is self-contained, completely independent. Compact—only 24½" x 24½" x 70". One-man operation from either side of locomotive. Makes 1,750 gallons of fire-smothering foam.



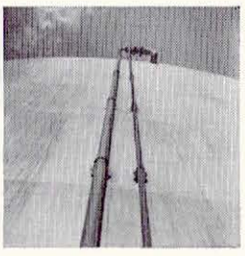
Diesel Repair Shops

A Pyrene* Proportioning Tank in an out-of-the-way location can supply as much as 1,000 gallons of foam a minute to one or more Pyrene Foam Playpipes at convenient locations.



Oil Storage Tanks

Tanks of any size can be protected with any one of several Pyrene Systems, manual or automatic. They deliver hundreds or thousands of gallons of foam per minute.



General Protection

Rolling stock and buildings can be safeguarded by a wide range of types and sizes of Pyrene Fire Extinguishers and wheeled units. Where vibration is excessive, the Pyrene Heavy Vehicle Vaporizing Liquid Extinguisher will give twice the service life of ordinary vaporizing liquid extinguishers.

*T. M. Reg. U.S. Pat. Off.

Write for Pyrene's Railroad Fire Protection Folder

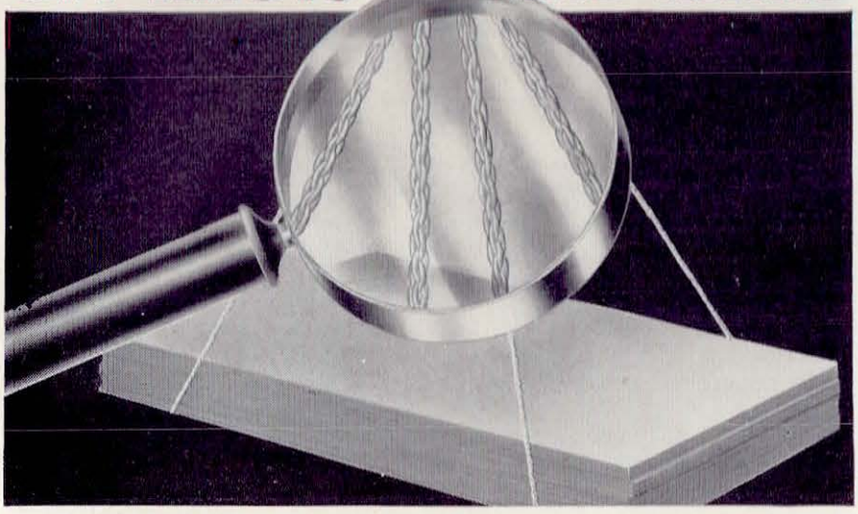
Read in detail about the various methods Pyrene has devised to help you protect your capital investment.

PYRENE MANUFACTURING COMPANY

678 Belmont Avenue • Newark 8, N.J.

Affiliated with C-O-Two Fire Equipment Co.

Tuffy® Fights OFF KNOTS AND KINKS



That's One Reason Users Report:

"Tuffy® SLINGS Last 3 to 4 Times Longer"

Only Tuffy has the new, braided fabric construction that (1) fights off knots and kinks, yet (2) can take much more stresses of distortion than ordinary wire rope. It means big savings in time, costs and delays on the job.

To make Tuffy Slings, scores of wires are stranded into 9 parts, then machine-woven into an interlaced wire fabric that has greater flexibility, extra safety and strength. Send for a *free* 3-ft. sample of Tuffy Sling fabric and test it yourself.

Proof-Tested For Safety. Each of the 12 types of Tuffy Slings is proof-tested to twice its safe working load. You'll find the working load figure on the metal eye splice sleeve. It's your assurance of a safe, longer-lasting sling.

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FIRM NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Maritimes provinces. After successively holding the positions of assistant engineer on the Grand Trunk arbitration, and with the St. John Drydock & Shipbuilding Co., he joined the CNR as

Bernard A. Allen

assistant engineer in the bureau of economics in 1924. He was later appointed assistant economist in the bureau and subsequently in the department of research and development. He helped supervise ship construction during World War II, first as assistant to the general manager, and then as manager, at the Prince Rupert (B.C.) drydock and shipyard. He became assistant general superintendent of the British Columbia district in 1946, then general superintendent, and manager, successively, within the following year.

Mr. Behan entered railway service in

J. J. Behan

1911 as a clerk in the accounting office of the old Canadian Northern. Following overseas service in World War I, he returned to Toronto and entered the office of general superintendent. In 1923 he was transferred to Montreal, becoming district superintendent of car service there in 1927. He was transferred to the Western region in 1939 as superintendent of car service and eight years later was appointed assistant general superintendent of transportation. He became general superintendent of transportation at Winnipeg in 1949.

(*Continued from page* 16)

and further consideration given to unlimited approval.

For the benefit of car owners contemplating installation of these lubricators and information of railroad forces responsible for servicing the cars, the letters included general application and maintenance instructions supplied by the respective manufacturers, who may be approached directly for further details as required.

One of the A.A.R. letters listed the numbers of individual cars equipped with journal lubricators supplied by the Hennessey Lubricator Company. These included 10 Baltimore & Ohio express cars; 35 B&O hopper cars; 10 Pennsylvania express cars; eight Southern box cars; two Union Pacific box cars; three Erie box cars; and two Wilson refrigerator cars.

Jeffers journal lubricators, furnished by the Fullo Corporation, were said to be applied to only a limited number of cars to date, but the second letter called attention to arrangements now being made to install more of them in interchange freight service and said a complete list of railroads and car numbers involved will be furnished as soon as made available by the manufacturer.

Replacing Old Style Ball-Check Covers

A circular letter, released by the Mechanical Division of the Association of American Railroads on September 4, calls attention to Interchange Rule 60, Section 1, Note 6, which requires replacement of the old style ball-check cover with a new style cover (Pc. No. 95051 or CV-101) on the emergency portion of AB brakes at the time of periodic attention. The important objective of this change is to minimize air leakage in brake systems in the interest of more effective and safer train braking; since the first of this year, the full cost of applying the new style cover has been included in the charge for periodic brake attention, as specified in Rule 111, Items 15 and 15-A.

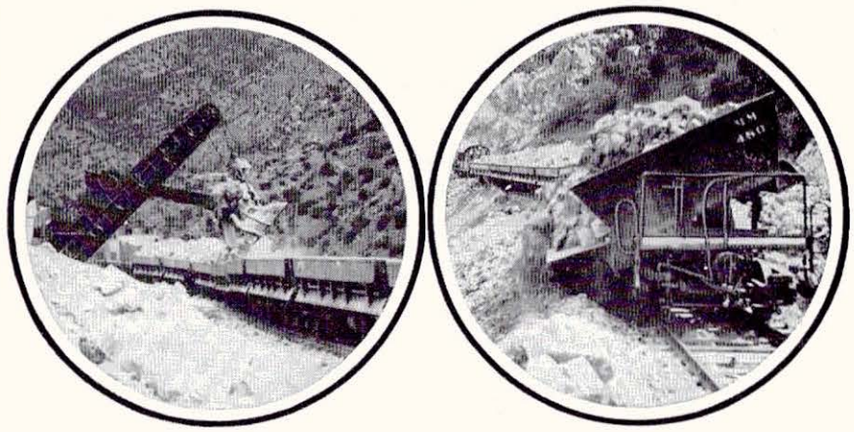
According to the A.A.R. letter, a check by one of the larger railroads, subsequently confirmed by investigations of the Committee on Brakes and Brake Equipment, as well as the Mechanical Inspection Department, revealed that a considerable number of cars on which air brakes received periodic attention since January 1, 1951, still had old style ball-check covers on the emergency portions. The study uncovered 391 of these AB valves with old covers in railroad service stock and 467 in private-car stock; also 13 valves with old covers applied to railroad cars and 17 to private cars. The period covered in the study was from January 1, 1951, to June 30, 1952. The circular letter urges that individual railroads take prompt steps to correct this condition.

"Columbia Basin Project Portends High Carloadings"

Present and future power irrigation projects in the Columbia River Basin, "will bring a tremendous upsurge in carloadings, both inbound and outbound, as they become a reality," H. T. Nelson, regional director of the U. S. Department of Interior's Bureau of Reclamation, Boise, Idaho, told members of the Pacific Northwest Advisory Board recently.

Speaking to some 350 members and guests at the board's 84th regular meeting at Spokane, Wash., Mr. Nelson said the four million acres currently under irrigation represent only one-seventh the potential of the basin area. Power and irrigation projects, he added, are on a self-liquidating basis and of the $800 million currently invested, "all but two

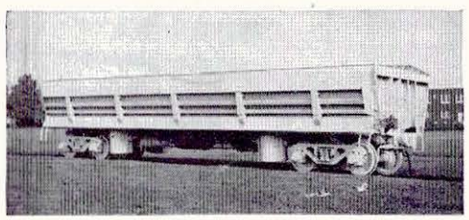
Yes, you're seeing DOUBLE



In fact, when you watch Differential Air Dump Cars in action you're seeing double in several respects —

DOUBLE ACTION — they dump cars both ways, to left or to right. The 50° dumping angle assures a clean dump, and the massive air cylinders (two on each side) assure speedy, reliable dumping power. The double trunnion, double fulcrum design are key features in Differential's amazing performance.

DOUBLE UTILITY — Good for hauling in ore and good for hauling out waste materials. Car is built to withstand abuse and heavy service. If you haul as many as 400 to 500 carloads yearly, the savings with Differential equipment will pay for the cars.



Differential Products Include: Air Dump Cars, Locomotives, Mine Cars, Mine Supply Cars, Rock Larries, Mantrip Cars, Dumping Devices and Complete Haulage Systems

DIFFERENTIAL STEEL CAR COMPANY

FINDLAY, OHIO

SINCE 1915 — PIONEERS IN HAULAGE EQUIPMENT

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Operating Expenses: Maint. Way and Structures: Total 1952	Total 1951	Deprec. and Retirements	Maint. Equipment: Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	Operating ratio 1952	Operating ratio 1951	Net from railway operation	Railway tax accruals	Net railway operating income 1952	Net railway operating income 1951
Akron, Canton & Youngstown	Aug.	171	$472	....	$483	$521	$88	$73	$9	$52	$57	$16	$35	$136	$342	$342	70.8	65.7	$141	$38	$84	$68
	8 mos.	171	3,535	....	3,624	3,766	601	558	53	434	378	125	290	1,082	2,658	2,557	73.4	67.9	965	361	464	438
Atchison, Topeka & Santa Fe	Aug.	13,072	34,181	$5,321	44,010	48,986	7,277	7,201	722	8,623	9,418	1,703	1,050	15,574	34,687	36,127	78.8	73.8	9,323	5,664	3,838	5,708
	8 mos.	13,073	316,058	40,180	392,014	369,871	56,932	62,439	5,571	72,319	73,722	13,386	9,107	124,071	279,225	285,527	71.2	77.2	112,789	64,005	46,742	32,771
Atlanta & St. Andrews Bay	Aug.	82	297	2	304	308	42	31	2	21	23	4	9	63	152	146	49.8	47.5	153	78	47	50
	8 mos.	82	2,333	14	2,409	2,401	290	272	22	185	165	33	72	508	1,180	1,108	49.0	46.2	1,228	635	377	382
Atlanta & West Point	Aug.	93	264	50	356	373	41	41	5	61	61	11	15	168	309	302	86.7	80.9	47	30	1	13
	8 mos.	93	2,234	396	3,020	2,996	367	282	42	476	449	91	120	1,289	2,447	2,470	81.0	82.4	573	325	137	88
Western Ry. of Alabama	Aug.	133	287	48	371	358	44	40	6	72	69	15	15	144	297	283	80.2	79.0	74	39	34	23
	8 mos.	133	2,369	381	3,074	3,058	393	433	55	547	504	110	125	1,139	2,386	2,384	77.6	78.0	688	389	301	229
Atlantic & Danville	Aug.	205	146	....	148	153	25	34	2	11	9	5	12	52	111	125	75.1	81.7	37	10	5	2
	8 mos.	205	1,243	....	1,262	1,165	264	230	15	103	76	38	92	415	968	905	76.7	77.7	294	79	60	56
Atlantic Coast Line	Aug.	5,472	9,530	1,555	11,968	12,014	2,803	2,013	104	3,308	2,660	534	356	4,613	11,6'8	10,288	97.2	85.6	330 Cr	300	613	767
	8 mos.	5,472	92,059	15,694	116,113	105,944	19,820	21,661	991	23,029	20,346	4,225	2,883	39,466	90,169	89,427	77.7	84.4	25,944	15,200	8,330	4,789
Charleston & Western Carolina	Aug.	343	442	2	461	530	157	136	6	121	72	42	17	171	480	411	104.2	77.6	—19	Cr 10	7	55
	8 mos.	343	4,253	24	4,407	4,359	1,116	1,101	34	903	635	317	142	1,406	3,671	3,323	83.3	76.2	736	325	387	466
Baltimore & Ohio	Aug.	6,187	35,148	1,941	39,673	40,160	5,149	5,354	362	7,109	8,588	982	871	15,085	29,984	32,048	75.6	79.8	9,689	3,904	4,578	3,006
	8 mos.	6,187	249,955	16,697	285,982	295,724	37,415	38,994	3,270	59,776	65,837	7,789	6,922	114,666	230,893	242,749	80.7	82.1	55,089	19,401	28,109	23,720
Staten Island Rapid Transit	Aug.	29	261	57	322	324	61	37	7	26	36	2	1	163	289	272	89.7	83.8	33	37	—26	—3
	8 mos.	29	2,043	423	2,493	2,319	447	400	86	257	302	15	12	1,203	2,170	2,129	87.0	91.8	323	291	—164	—218
Bangor & Aroostook	Aug.	602	693	43	785	729	250	205	16	214	145	73	16	225	761	669	96.9	91.8	25	44	72	48
	8 mos.	602	8,439	302	9,106	7,459	1,970	1,511	133	1,847	1,398	562	160	2,504	6,955	5,547	76.4	74.3	2,151	1,156	1,182	888
Bessemer & Lake Erie	Aug.	212	3,368	1	3,394	3,183	207	254	19	556	973	123	29	499	1,389	1,944	40.9	61.1	2,005	848	1,309	515
	8 mos.	212	15,056	6	15,227	19,389	1,559	1,644	157	4,567	5,512	840	155	3,479	10,527	12,175	69.1	62.8	4,700	3,189	3,122	3,675
Boston & Maine	Aug.	1,701	5,373	1,198	7,385	7,454	1,309	1,304	192	1,127	1,123	178	99	3,068	5,936	6,025	80.4	80.8	1,449	700	445	466
	8 mos.	1,701	43,249	8,158	58,142	58,421	10,832	10,371	1,481	9,086	9,420	1,387	913	25,020	48,480	48,485	83.4	83.0	9,662	4,819	2,345	2,281
Cambria & Indiana	Aug.	35	129	....	129	137	22	15	1	67	89	22	....	19	114	142	88.4	103.5	15	84	81	50
	8 mos.	35	1,021	....	1,021	1,065	142	98	6	631	661	156	1	173	1,005	1,029	98.4	96.7	16	532	426	452
Canadian Pacific Lines in Maine	Aug.	234	239	58	334	322	124	112	5	86	104	12	8	175	407	397	122.0	123.2	—73	28	—121	—139
	8 mos.	234	4,043	415	4,706	4,469	988	838	41	788	689	70	62	1,870	3,820	3,343	81.2	74.8	886	231	112	452
Canadian Pacific Lines in Vermont	Aug.	90	216	17	255	210	67	57	4	25	35	....	7	119	226	236	89.0	111.9	28	13	—35	—92
	8 mos.	90	1,516	110	1,784	1,793	548	424	30	242	256	2	52	962	1,870	1,740	104.8	97.0	—85	103	—618	—484
Central of Georgia	Aug.	1,786	2,922	244	3,427	3,305	569	522	44	600	538	100	128	1,490	2,975	2,879	86.8	87.1	452	210	226	170
	8 mos.	1,786	24,271	1,831	28,777	28,639	4,751	5,179	358	4,875	4,822	832	1,047	12,137	24,402	25,205	84.8	88.0	4,375	2,230	1,759	897
Central of New Jersey	Aug.	411	2,896	524	3,711	3,891	511	558	76	520	638	75	56	1,803	3,047	3,338	82.1	85.8	664	385	—82	—197
	8 mos.	411	22,473	3,867	28,716	28,800	3,958	3,896	585	4,877	4,979	624	466	14,439	25,078	25,623	87.3	89.0	3,637	3,229	—2,579	—2,857
Central of Pennsylvania	Aug.	207	1,665	6	1,714	1,702	243	185	13	379	415	77	24	506	1,196	1,230	69.8	72.3	518	229	576	624
	8 mos.	207	12,663	43	13,113	12,724	1,491	1,362	115	2,863	3,054	603	204	3,787	8,683	9,034	66.2	71.0	4,430	1,075	5,509	5,343
Central Vermont	Aug.	422	771	99	941	1,018	160	220	18	89	151	12	15	391	698	853	74.2	83.8	243	44	139	59
	8 mos.	422	6,196	545	7,273	7,710	1,442	1,451	134	1,243	1,291	99	125	3,307	6,459	6,376	88.8	82.7	814	355	—2	524
Chesapeake & Ohio	Aug.	5,116	27,767	854	30,153	33,748	3,989	4,540	368	5,637	6,310	1,412	643	8,952	20,447	23,232	67.8	68.8	9,706	4,744	5,339	4,870
	8 mos.	5,116	217,830	6,027	235,317	237,140	33,157	31,906	2,805	48,282	45,577	11,345	5,012	75,174	171,728	171,156	73.0	72.2	63,589	32,423	34,343	30,365
Chicago & Eastern Illinois	Aug.	868	2,362	301	2,947	2,916	400	443	28	459	389	123	128	1,071	2,223	2,185	75.4	74.9	724	241	386	341
	8 mos.	868	18,000	2,167	22,607	21,987	2,931	3,056	235	3,575	3,146	931	937	8,365	17,189	16,641	76.0	75.7	5,418	1,899	2,676	2,400
Chicago & Illinois Midland	Aug.	130	419	....	438	746	37	122	7	97	188	21	27	161	360	597	82.2	79.9	78	38	13	83
	8 mos.	130	4,182	2	4,323	6,160	490	850	59	1,132	1,335	167	227	1,553	3,733	4,441	86.3	72.1	591	329	46	834
Chicago & North Western	Aug.	7,897	14,770	2,191	18,848	18,494	2,691	3,047	360	3,125	3,395	749	341	8,061	15,074	15,991	80.0	86.5	3,774	1,992	1,890	890
	8 mos.	7,908	99,682	15,424	130,449	132,158	21,593	21,331	2,717	25,336	25,795	5,927	2,801	62,085	118,608	119,415	90.9	90.4	11,841	8,504	—405	1,057
Chicago, Burlington & Quincy	Aug.	8,807	20,014	2,053	24,334	25,355	3,475	4,413	376	3,512	3,570	702	456	8,074	16,325	17,317	67.1	68.3	8,008	4,008	3,196	3,563
	8 mos.	8,810	138,875	13,390	169,543	172,926	26,399	26,689	3,607	27,697	26,043	5,565	3,760	60,960	125,337	124,376	73.9	71.9	44,206	24,245	16,859	18,728
Chicago Great Western	Aug.	1,474	2,937	38	3,168	2,954	510	726	38	407	480	119	113	1,002	2,212	2,387	69.8	80.8	956	353	339	187
	8 mos.	1,474	21,476	148	23,084	22,506	3,874	3,895	339	3,100	3,352	949	836	7,549	16,225	16,321	70.3	72.5	6,859	2,409	2,363	1,919
Chicago, Indianapolis & Louisville	Aug.	541	1,636	69	1,814	1,802	327	307	18	270	276	64	93	630	1,410	1,424	77.7	79.0	404	173	133	127
	8 mos.	541	12,801	546	14,265	13,933	2,567	2,435	149	2,206	2,253	508	710	4,999	11,256	11,187	78.9	80.3	3,009	1,180	1,019	914
Chicago, Milw., St. Paul & Pacific	Aug.	10,671	20,521	1,882	24,838	24,027	3,540	4,088	367	4,362	4,479	852	449	9,422	18,825	20,120	75.8	83.7	6,013	2,736	2,347	1,267
	8 mos.	10,671	142,675	13,036	173,724	170,591	27,128	25,901	3,080	36,307	35,088	7,106	3,837	72,807	148,472	148,268	85.5	86.9	25,252	13,063	7,869	5,471
Chicago, Rock Island & Pacific	Aug.	7,916	13,818	1,938	17,313	16,462	2,423	3,271	246	2,818	2,420	511	488	6,068	12,591	13,414	72.7	81.5	4,722	1,925	1,892	940
	8 mos.	7,916	114,519	13,892	140,899	130,617	18,247	19,399	1,947	22,763	20,631	3,979	3,902	51,148	102,557	101,976	72.8	78.1	38,342	16,935	15,761	9,429
Chicago, St. Paul, Minn. & Omaha	Aug.	1,617	2,905	238	3,399	3,185	487	496	48	366	381	88	64	1,521	2,566	2,605	75.5	81.8	833	188	373	225
	8 mos.	1,617	18,432	1,523	21,999	21,561	3,563	3,583	364	3,354	3,447	704	522	11,241	19,713	20,412	89.6	94.7	2,286	1,448	—867	1,699
Clinchfield	Aug.	317	2,022	2	2,035	1,948	290	258	21	347	319	80	43	433	1,148	1,103	56.4	56.6	886	227	794	785
	8 mos.	317	15,791	11	15,887	15,623	2,295	2,153	148	2,667	2,555	648	333	3,487	9,070	8,787	57.1	56.2	6,817	1,725	6,073	6,443

(*Continued from page* 16)

and further consideration given to unlimited approval.

For the benefit of car owners contemplating installation of these lubricators and information of railroad forces responsible for servicing the cars, the letters included general application and maintenance instructions supplied by the respective manufacturers, who may be approached directly for further details as required.

One of the A.A.R. letters listed the numbers of individual cars equipped with journal lubricators supplied by the Hennessey Lubricator Company. These included 10 Baltimore & Ohio express cars; 35 B&O hopper cars; 10 Pennsylvania express cars; eight Southern box cars; two Union Pacific box cars; three Erie box cars; and two Wilson refrigerator cars.

Jeffers journal lubricators, furnished by the Fullo Corporation, were said to be applied to only a limited number of cars to date, but the second letter called attention to arrangements now being made to install more of them in interchange freight service and said a complete list of railroads and car numbers involved will be furnished as soon as made available by the manufacturer.

Replacing Old Style Ball-Check Covers

A circular letter, released by the Mechanical Division of the Association of American Railroads on September 4, calls attention to Interchange Rule 60, Section 1, Note 6, which requires replacement of the old style ball-check cover with a new style cover (Pc. No. 95051 or CV-101) on the emergency portion of AB brakes at the time of periodic attention. The important objective of this change is to minimize air leakage in brake systems in the interest of more effective and safer train braking; since the first of this year, the full cost of applying the new style cover has been included in the charge for periodic brake attention, as specified in Rule 111, Items 15 and 15-A.

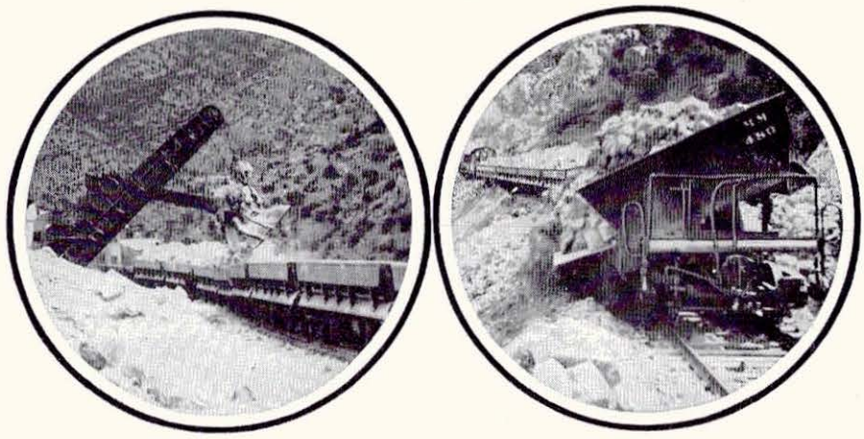
According to the A.A.R. letter, a check by one of the larger railroads, subsequently confirmed by investigations of the Committee on Brakes and Brake Equipment, as well as the Mechanical Inspection Department, revealed that a considerable number of cars on which air brakes received periodic attention since January 1, 1951, still had old style ball-check covers on the emergency portions. The study uncovered 391 of these AB valves with old covers in railroad service stock and 467 in private-car stock; also 13 valves with old covers applied to railroad cars and 17 to private cars. The period covered in the study was from January 1, 1951, to June 30, 1952. The circular letter urges that individual railroads take prompt steps to correct this condition.

"Columbia Basin Project Portends High Carloadings"

Present and future power irrigation projects in the Columbia River Basin, "will bring a tremendous upsurge in carloadings, both inbound and outbound, as they become a reality," H. T. Nelson, regional director of the U. S. Department of Interior's Bureau of Reclamation, Boise, Idaho, told members of the Pacific Northwest Advisory Board recently.

Speaking to some 350 members and guests at the board's 84th regular meeting at Spokane, Wash., Mr. Nelson said the four million acres currently under irrigation represent only one-seventh the potential of the basin area. Power and irrigation projects, he added, are on a self-liquidating basis and of the $800 million currently invested, "all but two

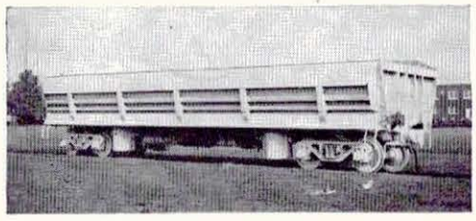
Yes, you're seeing DOUBLE



In fact, when you watch Differential Air Dump Cars in action you're seeing double in several respects —

DOUBLE ACTION — they dump cars both ways, to left or to right. The 50° dumping angle assures a clean dump, and the massive air cylinders (two on each side) assure speedy, reliable dumping power. The double trunnion, double fulcrum design are key features in Differential's amazing performance.

DOUBLE UTILITY — Good for hauling in ore and good for hauling out waste materials. Car is built to withstand abuse and heavy service. If you haul as many as 400 to 500 carloads yearly, the savings with Differential equipment will pay for the cars.



Differential Products Include: Air Dump Cars, Locomotives, Mine Cars, Mine Supply Cars, Rock Larries, Mantrip Cars, Dumping Devices and Complete Haulage Systems

DIFFERENTIAL STEEL CAR COMPANY

FINDLAY, OHIO

SINCE 1915 — PIONEERS IN HAULAGE EQUIPMENT

per cent is due to be returned to the treasury." For every 500,000 acres brought under irrigation, 16,000 carloads of inbound freight, and 6,000 carloads outbound, could be anticipated each year, he said.

The board's freight loss and damage committee reported on training films and pamphlets used in employee educational programs by both shippers and carriers. The committee, pointing out that such procedures are common on most roads, said more progress is made each time a shipper becomes sufficiently interested to admit careless handling and seeks to correct the situation.

Wabash Begins Work On a Motion Picture

Production has begun on a motion picture tentatively titled "Once Upon the Wabash," which will portray the history and development of that railroad since its start 114 years ago, but which will concentrate on the road as it is today.

St. Louis is the locale for many of the scenes, but other points served also will be included. A number of sequences will take place aboard the dome streamliner "Bluebird."

The film will be in color and will have a professional cast. When completed early in 1953, it will be made available to traffic clubs, railway groups, service clubs, schools and similar organizations. Condor Films, Inc., of St. Louis are producing the picture under the direction of Tom M. Hayes, passenger traffic manager, and Leo A. Brown, general advertising agent.

Cast Iron with Properties of Steel

After several years of laboratory development and a commercial use which had its beginning prior to 1949, the International Nickel Company reported progress in use of ductile iron at its laboratory at Bayonne, N.J., to a group of business paper and newspaper editors on September 25.

Ductile—or spheroidal—iron is a cast-iron that bends. In ordinary gray iron the graphitic carbon is distributed in flakes which form a multitude of discontinuities in the metallic matrix. It is a relatively weak and brittle material. By a process on which patents have been granted to the International Nickel Company, magnesium is introduced into the iron to change the form in which the graphite is distributed from the laminae of gray cast iron to spheroids. This greatly increases the proportion of the metallic matrix structure. The material thereby acquires some of the properties of steel while retaining the machinability of cast iron. It is ductile and its properties can be

Announcing an Important New Fire Resistant Product for Railway Application

POSITIVE FIRE PROTECTION

for Upright Surfaces

ZONE FIREPLATE

Patent Pending

Now . . . from the company that developed the famous Libbey-Zone fire resistant process comes a completely new product—FIREPLATE. This new product is scientifically correct and thoroughly field tested and proved. FIREPLATE serves a dual purpose: (1) provides exceptional protection against drying, rotting and deterioration and (2) assures almost perfect protection against fire damage.

Even when subjected to extremes of heat, FIREPLATE remains stable . . . will not liquify or run. Equally important, FIREPLATE is not subject to deterioration . . . the original application is all that is ever needed.

The photos below, reproduced, taken on March 28, 1952, during a typical FIREPLATE field test, show conclusively the ability of this remarkable new product development to resist fire damage. You are invited to get the complete facts about FIREPLATE. Let us arrange a demonstration . . . or send you sufficient FIREPLATE to conduct your own tests if you prefer. Write without obligation.

Start of Test The pole at the left is treated with FIREPLATE: the other pole is treated with a conventional protective coating.

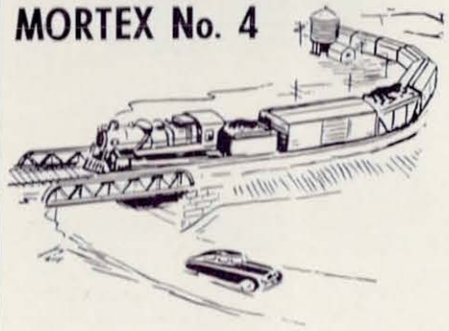
Test Concluded Both poles shown 16 minutes after the start of the test. The FIREPLATE treatment has prevented traceable damage.

FIREPLATE (Pat. Pending) IS OUR EXCLUSIVE DEVELOPMENT MADE AND SOLD ONLY BY

THE ZONE COMPANY

Division of the Southwestern Petroleum Company
Box 789 • Ft. Worth 1, Tex.

CONSERVE ROLLING STOCK, YARD and Right-of-Way EQUIPMENT with MORTEX No. 4



- Protects against rain and moisture
- Protects against salt brine
- Protects against acid and alkali fumes
- Odorless
- Non-toxic
- Vermin-proof

One application of this tested coating is far superior to paints and cut-back asphalt products. It's the most practical low-cost rust preventive for roofs, interiors and underframes of steel freight and refrigerator cars, covered hopper cars used for soda ash, lime and similar products, ice bunkers and equipment exposed to acid fumes and gases.

It's tops for steel bridges, cooling system ducts and sump, outside storage tanks, tool houses and bins.

Will not run, sag, blister or craze at temperatures up to 250° F.

EASY TO APPLY

Mortex No. 4 can be put on with brush, trowel or spray. It adheres to any clean, dry surface and forms a rich, dull black finish.

TRY IT YOURSELF

Most railroads get Mortex No. 4 in 55-gallon drums, but you can order either a 1-gallon or a 5-gallon can and put it through your own comparative tests.

Write for literature

J. W. MORTELL CO.

Technical Coatings since 1895

563 Burch St., Kankakee, Ill.

altered by introducing alloying elements into the metal and by heat treatment. It can be welded, is wear resistant and withstands shocks.

While used commercially in small quantities prior to 1949, the commercial tonnage produced in that year was approximately 3,500 melt tons, which increased approximately to 20,000 tons in 1950 and is expected to reach 80,000 to 100,000 tons in 1952. Some 200 companies throughout the world are operating between 500 and 600 foundries which are licensed to produce ductile iron under International Nickel Company patents.

Ultimate tensile strength of ductile iron ranges from 70,000 lb. to over 110,000 lb. per sq. in. as cast, with a range of Brinell hardness from about 150 at the lower tensile to approximately 260 at the upper, and elongations above 20 per cent at the lower tensile to less than 4 per cent at the higher. The chemical composition range is as follows:

	Per cent
Total carbon	3.45—3.80
Silicon	2.2 —3.0
Manganese	0.20—0.35
Phosphorous	0.06—0.08
Nickel	0.60—0.90
Magnesium	0.06—0.08

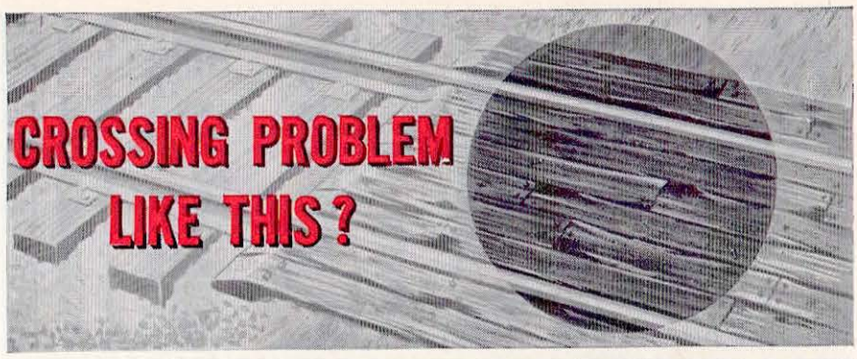
Ductile iron is an intermediate material covering a range of uses between those of cast iron and steel and overlapping well into the fields of both materials. The fluidity of the molten material permits its use in production of castings, the sections of which are too thin to permit use of steel. Its superior physical properties permit castings to be used in place of many parts which are customarily steel forgings. It is now being used in production of diesel engine crankshafts in which weight is saved by coring. Its use is anticipated in manufacture of car wheels in which heat treatment rather than chill molds will be depended upon for production of wear resistance of tread and flange. Its wear resistance adapts it to use in many types of forming dies.

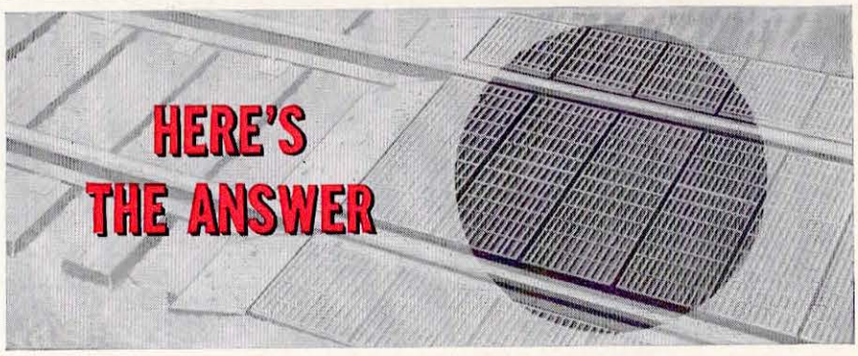
W. E. Hayghe Will Retire October 31

William E. Hayghe, director of the Traffic Management Division, Federal Supply Service, General Services Administration, will retire from that position on October 31. He will have completed 33 years of service in government traffic work.

SP Yardmasters Shift Bargaining Representative

The Railroad Yardmasters of North America has supplanted the Railroad Yardmasters of America as collective-bargaining representative of yardmasters on the Southern Pacific's Pacific Lines, according to results of a recent election which has been certified by the National Mediation Board. The vote was 187 to 100.





BLAW-KNOX STEEL CROSSINGS

stand up under the heavy beating from present-day traffic . . . sections are constructed from electroforged steel grating. They outlast old style crossings many times over.

Ties stay dry with Blaw-Knox Steel Crossings because the open grating allows perfect drainage and ventilation. "Pumping" is virtually eliminated. The one-piece sections are light and easy to install . . . track maintenance is greatly simplified.

Serve the public's interest as well as your own with Blaw-Knox Crossings—the long-lasting crossings that eliminate bumps, jars and jolts. We will be glad to send you complete information.

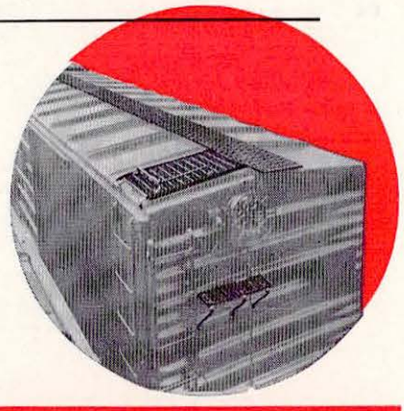
Distributors for Blaw-Knox Gratings for Railroad Crossings

East of the Mississippi: Russell Steel Products Co.
332 South Michigan Ave., Chicago 4, Ill.

West of the Mississippi: Brodhead Steel Products Co.
17th and Wisconsin Sts., San Francisco 10, Cal.

Railway Equipment and Grating Department

BLAW-KNOX COMPANY
Blaw-Knox Division
2044 Farmers Bank Bldg., Pittsburgh 22, Pa.



BLAW-KNOX RUNNING BOARDS AND STEPS—are constructed from electroforged steel grating—as are Blaw-Knox platforms, diesel ramps, battery boxes, battery shelves and fan funnel grills. Write for Bulletin 2395.

BLAW-KNOX ELECTROFORGED® STEEL CROSSINGS, RUNNING BOARDS, STEPS

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Operating Expenses: Maint. Way and Structures: Total 1952	Total 1951	Deprec. and Retirements	Maint. Equipment: Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	Operating ratio 1952	Operating ratio 1951	Net from railway operation	Railway tax accruals	Net railway operating income 1952	Net railway operating income 1951
Akron, Canton & Youngstown	Aug.	171	$472	....	$483	$521	$88	$73	$9	$52	$57	$16	$35	$136	$342	$342	70.8	65.7	$141	$38	$84	$68
	8 mos.	171	3,535	....	3,624	3,766	601	558	53	434	378	125	290	1,082	2,658	2,557	73.4	67.9	965	361	464	438
Atchison, Topeka & Santa Fe	Aug.	13,072	34,181	$5,321	44,010	48,986	7,277	7,201	722	8,623	9,418	1,703	1,050	15,574	34,687	36,127	78.8	73.8	9,323	5,664	3,838	5,708
	8 mos.	13,073	316,058	40,180	392,014	369,871	56,932	62,439	5,571	72,319	73,722	13,386	9,107	124,071	279,225	285,527	71.2	77.2	112,789	64,005	46,742	32,771
Atlanta & St. Andrews Bay	Aug.	82	297	2	304	308	42	31	2	21	23	4	9	63	152	146	49.8	47.5	153	78	47	50
	8 mos.	82	2,333	14	2,409	2,401	290	272	22	185	165	33	72	508	1,180	1,108	49.0	46.2	1,228	635	377	382
Atlanta & West Point	Aug.	93	264	50	356	373	41	41	5	61	61	11	15	168	309	302	86.7	80.9	47	30	1	13
	8 mos.	93	2,234	396	3,020	2,996	367	282	42	476	449	91	120	1,289	2,447	2,470	81.0	82.4	573	325	137	88
Western Ry. of Alabama	Aug.	133	287	48	371	358	44	40	6	72	69	15	15	144	297	283	80.2	79.0	74	39	34	23
	8 mos.	133	2,369	381	3,074	3,058	393	433	55	547	504	110	125	1,139	2,386	2,384	77.6	78.0	688	389	301	229
Atlantic & Danville	Aug.	205	146	....	148	153	25	34	2	11	9	5	12	52	111	125	75.1	81.7	37	10	5	2
	8 mos.	205	1,243	....	1,262	1,165	264	230	15	103	76	38	92	415	968	905	76.7	77.7	294	79	60	56
Atlantic Coast Line	Aug.	5,472	9,530	1,555	11,968	12,014	2,803	2,013	104	3,308	2,660	534	356	4,613	11,6 '8	10,288	97.2	85.6	330	Cr 300	613	767
	8 mos.	5,472	92,059	15,694	116,113	105,944	19,820	21,661	991	23,029	20,346	4,225	2,883	39,466	90,169	89,427	77.7	84.4	25,944	15,200	8,330	4,789
Charleston & Western Carolina	Aug.	343	442	2	461	530	157	136	6	121	72	42	17	171	480	411	104.2	77.6	—19	Cr 10	7	55
	8 mos.	343	4,253	24	4,407	4,359	1,116	1,101	34	903	635	317	142	1,406	3,671	3,323	83.3	76.2	736	325	387	466
Baltimore & Ohio	Aug.	6,187	35,148	1,941	39,673	40,160	5,149	5,354	362	7,409	8,588	982	871	15,085	29,984	32,048	75.6	79.8	9,689	3,904	4,578	3,006
	8 mos.	6,187	249,955	16,697	285,982	295,724	37,415	38,994	3,270	59,776	65,837	7,789	6,922	114,666	230,893	242,749	80.7	82.1	55,089	19,401	28,109	23,720
Staten Island Rapid Transit	Aug.	29	261	57	322	324	61	37	7	26	36	2	1	163	289	272	89.7	83.8	33	37	—26	—3
	8 mos.	29	2,043	423	2,493	2,319	447	400	86	257	302	15	12	1,203	2,170	2,129	87.0	91.8	323	291	—164	—218
Bangor & Aroostook	Aug.	602	693	43	785	729	250	205	16	214	145	73	16	225	761	669	96.9	91.8	25	44	72	48
	8 mos.	602	8,439	302	9,106	7,459	1,970	1,511	133	1,847	1,398	562	160	2,504	6,955	5,547	76.4	74.3	2,151	1,156	1,182	888
Bessemer & Lake Erie	Aug.	212	3,368	1	3,394	3,183	207	254	19	556	973	123	29	499	1,389	1,944	40.9	61.1	2,005	848	1,309	515
	8 mos.	212	15,056	6	15,227	19,389	1,559	1,644	157	4,567	5,512	840	155	3,479	10,527	12,175	69.1	62.8	4,700	3,189	3,122	3,675
Boston & Maine	Aug.	1,701	5,373	1,198	7,385	7,454	1,309	1,304	192	1,127	1,123	178	99	3,068	5,936	6,025	80.4	80.8	1,449	700	445	466
	8 mos.	1,701	43,249	8,158	58,142	58,421	10,832	10,371	1,481	9,086	9,420	1,387	913	25,020	48,480	48,485	83.4	83.0	9,662	4,819	2,345	2,281
Cambria & Indiana	Aug.	35	129	....	129	137	22	15	1	67	89	22	....	19	114	142	88.4	103.5	15	84	81	50
	8 mos.	35	1,021	....	1,021	1,065	142	98	6	631	661	156	1	173	1,005	1,029	98.4	96.7	16	532	426	452
Canadian Pacific Lines in Maine	Aug.	234	239	58	334	322	124	112	5	86	104	12	8	175	407	397	122.0	123.2	—73	28	—121	—139
	8 mos.	234	4,043	415	4,706	4,469	988	838	41	788	689	70	62	1,870	3,820	3,343	81.2	74.8	886	231	112	452
Canadian Pacific Lines in Vermont	Aug.	90	216	17	255	210	67	57	4	25	35	....	7	119	226	236	89.0	111.9	28	13	—35	—92
	8 mos.	90	1,516	110	1,784	1,793	548	424	30	242	256	2	52	962	1,870	1,740	104.8	97.0	—85	103	—618	—484
Central of Georgia	Aug.	1,786	2,922	244	3,427	3,305	569	522	44	600	538	100	128	1,490	2,975	2,879	86.8	87.1	452	210	226	170
	8 mos.	1,786	24,271	1,831	28,777	28,639	4,751	5,179	358	4,875	4,822	832	1,047	12,137	24,402	25,205	84.8	88.0	4,375	2,230	1,759	897
Central of New Jersey	Aug.	411	2,896	324	3,711	3,891	511	558	76	520	638	75	56	1,803	3,047	3,338	82.1	85.8	664	385	—82	—197
	8 mos.	411	22,473	3,867	28,716	28,800	3,958	3,896	585	4,877	4,979	624	466	14,439	25,078	25,623	87.3	89.0	3,637	3,229	—2,579	—2,857
Central of Pennsylvania	Aug.	207	1,665	6	1,714	1,702	243	185	13	379	415	77	24	506	1,196	1,230	69.8	72.3	518	229	576	624
	8 mos.	207	12,663	43	13,113	12,724	1,491	1,362	115	2,863	3,054	603	204	3,787	8,683	9,034	66.2	71.0	4,430	1,075	5,509	5,343
Central Vermont	Aug.	422	771	99	941	1,018	160	220	18	89	151	12	15	391	698	853	74.2	83.8	243	44	139	59
	8 mos.	422	6,196	545	7,273	7,710	1,442	1,451	134	1,243	1,291	99	125	3,307	6,459	6,376	88.8	82.7	814	355	—2	524
Chesapeake & Ohio	Aug.	5,116	27,767	854	30,153	33,748	3,989	4,540	368	5,637	6,310	1,412	643	8,952	20,447	23,232	67.8	68.8	9,706	4,744	5,339	4,870
	8 mos.	5,116	217,830	6,027	235,317	237,140	33,157	31,906	2,805	48,282	45,577	11,345	5,012	75,174	171,728	171,156	73.0	72.2	63,589	32,423	34,343	30,365
Chicago & Eastern Illinois	Aug.	868	2,362	301	2,947	2,916	400	443	28	459	389	123	128	1,071	2,223	2,185	75.4	74.9	724	241	386	341
	8 mos.	868	18,000	2,167	22,607	21,987	2,931	3,056	235	3,575	3,146	931	937	8,365	17,189	16,641	76.0	75.7	5,418	1,899	2,676	2,400
Chicago & Illinois Midland	Aug.	130	419	....	438	746	37	122	7	97	188	21	27	161	360	597	82.2	79.9	78	38	13	83
	8 mos.	130	4,182	2	4,323	6,160	490	850	59	1,132	1,335	167	227	1,553	3,733	4,441	86.3	72.1	591	329	46	834
Chicago & North Western	Aug.	7,897	14,770	2,191	18,848	18,494	2,691	3,047	360	3,125	3,395	749	341	8,061	15,074	15,991	80.0	86.5	3,774	1,092	1,890	830
	8 mos.	7,908	99,682	15,424	130,449	132,158	21,593	21,331	2,717	25,336	25,795	5,927	2,801	62,085	118,608	119,415	90.9	90.4	11,841	8,504	—405	1,957
Chicago, Burlington & Quincy	Aug.	8,807	20,014	2,053	24,334	25,355	3,475	4,413	376	3,512	3,570	702	456	8,074	16,325	17,317	67.1	68.3	8,008	4,008	3,196	3,563
	8 mos.	8,810	138,875	13,390	169,543	172,926	26,399	26,689	3,607	27,697	26,043	5,565	3,760	60,960	125,337	124,376	73.9	71.9	44,206	24,245	16,859	18,728
Chicago Great Western	Aug.	1,474	2,937	38	3,168	2,954	510	726	38	407	480	119	113	1,002	2,212	2,387	69.8	80.8	956	353	339	187
	8 mos.	1,474	21,476	148	23,084	22,506	3,874	3,895	339	3,100	3,352	949	836	7,549	16,225	16,321	70.3	72.5	6,859	2,409	2,363	1,919
Chicago, Indianapolis & Louisville	Aug.	541	1,636	69	1,814	1,802	327	307	18	270	276	64	93	630	1,410	1,424	77.7	79.0	404	173	133	127
	8 mos.	541	12,801	546	14,265	13,933	2,567	2,435	149	2,206	2,253	508	710	4,999	11,256	11,187	78.9	80.3	3,009	1,180	1,019	914
Chicago, Milw., St. Paul & Pacific	Aug.	10,671	20,521	1,882	24,838	24,027	3,540	4,088	367	4,362	4,479	852	449	9,422	18,825	20,120	75.8	83.7	6,013	2,736	2,347	1,267
	8 mos.	10,671	142,675	13,036	173,724	170,591	27,128	25,901	3,080	36,307	35,088	7,106	3,837	72,807	148,472	148,268	85.5	86.9	25,252	13,063	7,869	5,471
Chicago, Rock Island & Pacific	Aug.	7,916	13,818	1,938	17,313	16,462	2,423	3,271	246	2,818	2,420	511	488	6,068	12,591	13,414	72.7	81.5	4,722	1,925	1,892	940
	8 mos.	7,916	114,519	13,892	140,899	130,617	18,247	19,399	1,947	22,763	20,631	3,979	3,902	51,148	102,557	101,976	72.8	78.1	38,342	16,935	15,761	9,429
Chicago, St. Paul, Minn. & Omaha	Aug.	1,617	2,905	238	3,399	3,185	487	496	48	366	381	88	64	1,521	2,566	2,605	75.5	81.8	833	188	373	225
	8 mos.	1,617	18,432	1,523	21,999	21,561	3,563	3,583	364	3,354	3,447	704	522	11,241	19,713	20,412	89.6	94.7	2,286	1,448	—867	1,699
Clinchfield	Aug.	317	2,022	2	2,035	1,948	290	258	21	347	319	80	43	433	1,148	1,103	56.4	56.6	886	227	794	785
	8 mos.	317	15,791	11	15,887	15,623	2,295	2,153	148	2,667	2,555	648	333	3,487	9,070	8,787	57.1	56.2	6,817	1,725	6,073	6,443

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Operating Expenses: Maint. Way and Structures: Total 1952	Total 1951	Deprec. and Retirements	Maint. Equipment: Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	Operating ratio 1952	Operating ratio 1951	Net from railway operation	Railway tax accruals	Net railway operating income 1952	Net railway operating income 1951
Colorado & Southern	Aug.	736	1,122	92	1,351	1,436	154	242	15	178	189	31	28	477	888	1,061	65.7	73.9	463	203	249	107
	8 mos.	736	8,332	652	10,013	10,298	1,194	1,341	150	1,598	1,613	273	228	3,671	7,140	7,514	71.3	73.0	2,873	1,623	1,171	845
Ft. Worth & Denver	Aug.	1,038	1,480	206	1,827	1,717	263	245	31	244	242	28	55	665	1,326	1,347	72.6	78.4	501	156	216	143
	8 mos.	1,038	12,818	1,327	15,437	14,145	2,351	2,121	256	1,956	1,973	247	446	5,629	11,160	10,754	72.3	76.0	4,277	1,482	1,909	1,294
Colorado & Wyoming	Aug.	40	140	....	237	275	9	15	3	26	18	11	1	98	145	154	61.4	56.2	91	19	68	37
	8 mos.	40	962	....	1,740	2,191	163	454	22	246	219	80	10	683	1,181	1,724	67.8	78.6	559	266	189	205
Columbus & Greenville	Aug.	168	121	....	127	141	7	56	4	25	28	6	4	56	110	155	87.1	110.4	16	23	2	—20
	8 mos.	168	1,114	....	1,162	1,339	236	356	29	227	246	47	33	385	1,025	1,188	88.2	88.7	137	162	43	37
Delaware & Hudson	Aug.	793	4,329	223	4,729	5,402	875	810	154	878	1,093	142	79	1,811	3,844	4,100	81.3	75.9	885	460	433	612
	8 mos.	793	34,673	1,387	37,379	39,192	5,578	5,354	607	7,606	8,026	1,142	657	14,387	29,865	30,468	79.9	77.7	7,514	3,873	3,991	4,145
Delaware, Lackawanna & Western	Aug.	962	6,334	830	7,925	7,611	900	905	136	1,344	1,463	301	162	3,233	5,900	6,276	74.4	82.5	2,025	1,115	1,012	625
	8 mos.	963	48,019	6,604	60,584	58,596	6,797	6,633	1,071	11,426	10,999	2,363	1,321	26,341	48,055	47,981	79.3	81.9	12,529	6,631	6,188	4,440
Denver & Rio Grande Western	Aug.	2,333	7,272	373	7,930	7,021	777	1,001	91	1,151	1,111	252	159	2,420	4,817	4,792	60.8	68.3	3,113	1,716	1,284	1,030
	8 mos.	2,333	46,474	2,340	50,743	48,429	6,933	6,685	714	8,994	8,592	1,863	1,387	16,837	36,464	34,600	71.9	71.5	14,279	7,965	6,144	6,599
Detroit & Mackinac	Aug.	232	170	....	172	233	43	75	3	23	22	9	4	37	118	155	68.2	66.3	55	30	28	28
	8 mos.	232	1,293	2	1,327	1,673	344	360	23	167	167	70	34	306	935	930	70.5	55.6	392	224	185	275
Detroit & Toledo Shore Line	Aug.	50	625	....	640	608	72	73	3	56	65	16	13	175	329	361	51.4	59.4	311	120	104	78
	8 mos.	50	4,871	....	4,968	5,064	612	578	26	485	471	144	112	1,530	2,844	2,929	57.2	57.8	2,125	778	655	555
Detroit, Toledo & Ironton	Aug.	464	1,274	1	1,346	1,490	191	216	20	262	257	70	27	374	908	970	67.5	65.1	438	224	206	210
	8 mos.	464	10,917	3	11,488	12,677	1,571	1,691	200	2,656	2,011	537	224	3,158	8,055	7,761	70.1	61.2	3,433	1,812	1,466	2,097
Duluth, Missabe & Iron Range	Aug.	569	7,684	2	8,981	7,909	742	648	65	622	743	96	9	2,243	2 769	3,812	42.0	48.2	5,212	1,607	3,484	1,459
	8 mos.	568	21,861	9	25,466	35,924	4,994	4,998	535	5,076	5,617	710	73	9,528	20,726	23,742	81.4	64.3	4,740	3,095	1,596	4,160
Duluth, South Shore & Atlantic	Aug.	539	725	10	786	757	133	157	9	125	134	20	26	259	561	590	71.4	77.9	225	31	173	96
	8 mos.	539	4,746	58	5,075	5,479	1,019	1,019	69	1,106	962	159	190	1,899	4,365	4,465	86.0	81.5	710	229	271	469
Duluth, Winnipeg & Pacific	Aug.	175	373	2	382	352	102	94	4	78	97	2	5	181	373	379	97.6	107.7	9	33	—60	—89
	8 mos.	175	4,076	9	4,135	3,428	669	585	34	618	549	17	42	1,798	5,184	2,687	77.0	78.4	950	311	132	97
Elgin, Joliet & Eastern	Aug.	236	3,350	....	4,459	4,784	144	510	25	574	564	101	31	1,521	2,417	2,974	54.2	62.2	2,042	708	793	443
	8 mos.	236	23,335	....	29,407	36,259	2,704	3,460	239	5,180	5,211	805	267	11,126	20,466	23,067	69.6	63.6	8,941	3,418	1,734	2,889
Erie Railroad	Aug.	2,242	13,400	670	15,406	15,407	2,377	2,399	248	2,115	2,364	479	344	6,158	11,636	12,207	75.5	79.2	3,771	1,664	1,553	1,416
	8 mos.	2,242	98,775	5,106	113,218	117,591	15,985	15,740	1,827	18,018	18,125	3,741	2,813	47,023	88,938	90,838	78.5	77.2	24,280	10,562	10,429	11,320
Florida East Coast	Aug.	571	1,281	421	1,867	1,750	334	394	41	452	459	64	70	793	1,813	1,892	97.1	108.1	54	Cr. 262	236	—367
	8 mos.	571	16,230	5,640	24,170	20,785	2,905	2,773	329	3,958	3,569	585	589	8,701	17,680	16,286	73.1	78.4	6,490	1,641	3,483	2,020
Georgia Railroad	Aug.	323	741	39	830	855	106	111	6	123	123	30	33	337	634	632	76.4	73.9	196	38	172	195
	8 mos.	323	5,664	295	6,477	6,405	922	958	69	1,024	979	211	266	2,695	5,193	5,015	80.2	78.3	1,284	313	1,130	1,162
Georgia & Florida	Aug.	360	384	....	387	343	86	83	4	44	37	7	22	110	278	280	71.7	81.5	109	20	53	17
	8 mos.	360	2,502	....	2,534	2,394	713	650	28	291	266	59	153	752	2,033	1,895	80.2	79.1	501	151	146	184
Grand Trunk Western	Aug.	952	4,032	262	4,576	4,601	758	927	49	839	919	91	72	2,034	3,864	4,247	84.5	92.3	712	319	—7	—122
	8 mos.	952	32,037	1,758	36,532	38,132	5,974	5,912	401	6,619	7,107	727	589	16,717	31,268	31,653	85.6	83.0	5,264	2,417	635	2,464
Can. Natl. Lines in New Engl.	Aug.	172	135	21	200	257	79	72	9	112	55	....	3	117	333	277	174.2	107.8	—133	24	—195	—86
	8 mos.	172	1,385	78	1,801	1,870	572	463	72	516	392	1	21	1,125	2,390	2,092	133.6	111.9	—589	188	—1,117	—741
Great Northern	Aug.	8,314	23,454	1,411	26,997	23,269	3,835	4,221	321	3,711	3,546	728	361	7,871	16,613	16,580	61.5	71.3	10,384	5,397	4,144	2,524
	8 mos.	8,314	137,006	9,854	158,911	158,429	29,852	29,461	2,458	29,514	27,450	4,993	3,137	56,280	125,330	123,052	78.9	77.7	33,580	18,448	12,080	11,506
Green Bay & Western	Aug.	224	227	....	234	358	62	115	5	39	68	14	18	84	218	304	92.9	85.1	17	2	—10	19
	8 mos.	224	2,323	....	2,390	2,737	575	753	43	309	330	114	160	687	1,854	2,054	77.6	75.1	536	286	110	302
Gulf, Mobile & Ohio	Aug.	2,766	6,813	476	7,789	7,249	1,155	1,325	74	1,324	1,328	246	262	2,210	5,294	5,454	68.0	75.2	2,495	1,153	1,010	666
	8 mos.	2,808	52,792	3,323	60,022	57,131	9,645	9,575	737	10,575	10,697	1,929	2,064	17,352	42,399	42,450	70.6	74.3	17,623	8,231	6,795	566
Illinois Central	Aug.	6,539	20,922	2,107	25,337	25,205	3,840	4,254	362	4,421	4,346	745	495	8,603	18,357	19,223	72.5	76.3	6,980	3,944	2,722	2,211
	8 mos.	6,539	160,668	15,202	195,548	190,529	31,065	31,654	2,889	32,563	33,660	5,869	3,938	71,160	146,864	149,208	75.1	78.3	48,683	27,580	17,687	18,304
Illinois Terminal	Aug.	447	961	88	1,192	1,203	150	171	27	174	175	34	38	448	865	930	72.6	77.3	327	154	109	88
	8 mos.	453	6,734	619	8,288	8,200	1,221	1,191	212	1,278	1,223	274	324	3,391	6,654	6,493	80.3	79.2	1,634	838	587	643
Kansas City Southern	Aug.	891	3,319	161	3,850	3,551	402	419	33	507	424	91	78	1,134	2,248	2,126	58.4	59.9	1,602	699	667	649
	8 mos.	891	26,927	1,213	30,787	29,328	3,378	3,033	260	3,783	3,651	688	684	8,907	17,737	17,007	57.6	58.0	13,050	6,050	5,216	4,951
Kansas, Oklahoma & Gulf	Aug.	327	637	1	643	592	105	90	6	43	30	9	25	120	315	299	49.1	50.5	328	171	119	127
	8 mos.	327	4,729	4	4,775	4,403	807	529	49	315	280	70	208	1,026	2,549	2,136	53.4	48.5	2,226	1,152	790	932
Lake Superior & Ishpeming	Aug.	156	574	....	717	764	56	55	9	49	49	11	2	136	254	293	35.4	38.4	463	238	236	216
	8 mos.	156	1,859	....	2,249	2,945	407	414	74	449	393	88	16	632	1,597	1,748	71.0	59.4	651	448	274	496
Lehigh & Hudson River	Aug.	96	280	....	281	274	42	46	3	30	27	9	13	85	179	180	63.8	65.7	102	43	38	37
	8 mos.	96	2,119	....	2,125	2,186	351	332	19	237	202	69	102	672	1,443	1,355	67.9	62.0	682	278	267	293
Lehigh & New England	Aug.	184	775	....	781	829	88	125	6	127	119	38	11	197	457	486	58.5	58.6	324	199	189	179
	8 mos.	184	5,481	....	5,530	5,731	599	824	51	1,023	918	298	92	1,501	3,497	3,609	63.2	63.0	2,033	1,254	1,229	*1,184
Lehigh Valley	Aug.	1,218	5,998	312	6,620	6,975	739	924	57	857	1,281	201	132	2,463	4,429	5,299	66.9	76.0	2,190	1,078	1,099	897
	8 mos.	1,220	45,223	2,603	50,581	51,412	6,378	6,881	653	8,468	9,489	1,516	1,114	19,863	37,817	40,036	74.8	77.9	12,764	5,469	6,983	6,102
Long Island	Aug.	365	1,154	3,245	4,614	4,819	607	626	86	781	859	120	14	2,173	3,738	4,079	81.0	84.6	876	488	148	—13
	8 mos.	365	8,857	24,251	34,997	35,494	4,891	4,903	688	6,287	6,837	948	118	18,622	31,256	32,043	89.3	90.3	3,741	3,914	—2,048	—2,316

*In *Railway Age* of August 18, page 26, net railway operating income for 6 months was incorrectly stated; the correct amount (in thousands) is $853.

(Table continued on next page)

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues				Operating Expenses										Operating ratio		Net from railway operation	Railway tax accruals	Net railway operating income	
							Maint. Way and Structures			Maint. Equipment												
			Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Total 1952	Total 1951	Deprec. and Retirements	Total 1952	Total 1951	Deprec. and Retirements	Traffic	Transportation	Total 1952	Total 1951	1952	1951			1952	1951
Louisiana & Arkansas	Aug.	756	2,100	71	2,245	2,134	382	394	20	295	326	87	69	578	1,393	1,604	62.0	75.2	852	336	419	199
	8 mos.	756	16,314	516	17,484	15,782	2,863	3,053	163	2,119	1,891	578	563	4,644	10,771	10,607	61.6	67.2	6,713	3,040	3,094	1,686
Louisville & Nashville	Aug.	4,765	15,387	1,295	18,121	19,552	2,478	2,657	249	4,025	4,339	705	325	6,630	14,081	14,799	77.7	75.7	4,040	2,665	2,011	2,209
	8 mos.	4,765	127,563	9,548	147,581	146,706	21,629	21,212	1,819	32,365	31,570	5,322	2,686	53,583	115,498	116,561	78.3	79.5	32,083	20,577	15,956	13,114
Maine Central	Aug.	981	1,739	177	2,076	2,252	456	475	46	349	368	69	19	780	1,687	1,700	81.3	75.5	389	190	201	213
	8 mos.	981	15,745	1,101	18,173	17,511	3,492	3,300	256	3,043	3,025	543	164	6,382	13,705	13,091	75.4	74.8	4,468	2,304	1,826	1,787
Midland Valley	Aug.	334	177	....	180	152	42	53	7	15	20	2	5	59	127	145	70.4	95.8	53	14	31	—22
	8 mos.	334	1,348	....	1,370	1,378	397	385	49	161	138	20	39	498	1,150	1,090	83.9	79.1	220	123	30	40
Minneapolis & St. Louis	Aug.	1,402	1,915	29	2,013	1,900	349	358	38	269	272	76	117	629	1,464	1,508	72.7	79.4	549	271	235	98
	8 mos.	1,405	13,822	64	14,362	13,862	2,537	2,659	209	2,261	2,135	588	953	4,733	11,344	11,217	79.0	80.9	3,018	1,624	1,125	722
Minn., St. Paul & Sault Ste. Marie	Aug.	3,223	4,387	169	4,803	3,810	842	763	47	590	707	96	71	1,518	3,155	3,122	65.7	81.9	1,648	664	906	529
	8 mos.	3,224	25,051	763	27,401	25,862	5,757	5,552	375	5,418	5,280	765	608	10,823	23,607	23,132	86.2	89.4	3,794	2,277	1,266	996
Mississippi Central	Aug.	148	219	....	223	221	41	46	2	24	28	3	13	62	149	153	66.8	69.2	74	38	26	25
	8 mos.	148	1,745	—1	1,774	1,743	353	336	17	211	224	26	104	514	1,260	1,196	71.0	68.6	514	257	175	206
Missouri-Illinois	Aug.	172	445	....	449	489	79	81	4	70	40	21	8	119	286	268	63.8	54.8	162	95	73	112
	8 mos.	172	3,411	2	3,442	3,468	592	532	30	573	523	162	68	945	2,253	2,107	65.5	60.8	1,189	691	569	552
Missouri-Kansas-Texas Lines	Aug.	3,242	6,073	372	7,018	6,514	1,002	851	164	1,073	963	224	250	2,450	5,077	4,967	72.3	76.3	1,941	782	892	498
	8 mos.	3,242	47,859	2,983	55,550	50,416	7,881	7,856	986	8,076	7,545	1,785	2,016	19,639	40,141	39,716	72.3	78.8	15,409	6,745	6,330	3,799
Missouri Pacific	Aug.	6,950	17,073	1,225	20,273	22,043	3,648	4,129	307	3,850	3,357	713	445	7,167	15,744	16,669	77.7	75.6	4,529	1,617	2,301	3,042
	8 mos.	6,950	136,118	8,490	160,341	154,344	26,811	27,295	2,199	30,516	30,319	5,609	3,622	58,504	124,583	126,144	77.7	81.7	35,758	13,449	17,960	13,734
International-Great Northern	Aug.	1,104	2,465	245	2,997	3,425	599	676	32	533	578	101	59	1,185	2,510	2,798	83.8	81.7	487	70	293	321
	8 mos.	1,104	21,053	1,618	24,877	25,330	5,222	5,280	280	4,507	4,332	801	466	9,762	21,017	21,129	84.5	83.4	3,861	886	1,916	1,882
Gulf Coast Lines	Aug.	1,727	3,132	113	3,465	3,678	787	699	44	549	523	99	92	1,173	2,747	2,758	79.2	75.0	718	152	392	376
	8 mos.	1,727	26,826	758	29,394	29,096	5,992	5,910	352	4,396	4,483	752	709	9,540	21,792	21,960	74.1	75.4	7,603	2,640	3,528	2,922
Monongahela	Aug.	178	641	....	645	854	92	98	10	77	92	8	1	206	381	449	59.1	52.6	264	2	161	158
	8 mos.	178	5,275	....	5,304	5,980	715	717	90	644	699	61	9	1,958	3,397	3,522	64.0	58.9	1,907	313	448	710
Montour	Aug.	51	191	....	191	254	31	43	3	61	96	17	1	76	173	237	90.2	93.4	19	31	36	33
	8 mos.	51	1,431	....	1,434	1,689	174	246	20	581	696	135	7	627	1,462	1,717	102.0	101.6	—29	281	290	202
Nashville, Chatt. & St. Louis	Aug.	1,032	2,782	176	3,400	3,170	576	606	45	434	472	92	111	1,126	2,366	2,377	69.6	75.0	1,034	504	536	—153
	8 mos.	1,032	22,789	1,294	26,735	25,071	4,603	4,551	385	3,818	3,744	963	908	9,151	19,437	19,137	72.7	76.3	7,298	3,713	3,644	2,284
New York Central	Aug.	10,718	46,768	10,329	65,499	69,951	9,953	9,508	895	12,907	13,942	2,308	1,059	27,767	54,762	58,512	83.6	83.6	10,737	5,245	4,765	4,273
	8 mos.	10,712	368,464	82,874	516,560	527,657	71,416	70,214	7,453	108,702	109,106	18,015	8,571	232,738	447,116	459,069	86.6	87.0	69,444	41,306	20,500	14,781
Pittsburgh & Lake Erie	Aug.	221	4,075	76	4,363	4,357	443	554	40	936	1,559	249	68	1,370	3,040	3,831	69.7	87.9	1,323	891	1,268	586
	8 mos.	221	26,031	604	28,015	33,049	3,538	4,077	329	3,335	10,227	1,922	576	10,368	24,616	28,134	87.9	85.1	3,399	3,778	5,772	5,211
New York, Chicago & St. Louis	Aug.	2,184	13,737	169	14,482	14,256	1,719	1,597	132	2,083	2,100	334	300	4,670	9,203	9,274	63.6	65.1	5,279	2,685	2,297	2,243
	8 mos.	2,186	97,262	1,412	102,228	105,148	12,851	12,150	1,129	16,611	17,493	2,629	2,451	36,296	71,722	72,975	70.2	69.4	30,506	15,584	13,218	14,432
New York, New Haven & Hartford	Aug.	1,793	7,416	4,423	13,288	13,240	1,950	2,188	269	2,117	2,243	375	185	5,835	10,783	11,116	81.2	84.0	2,505	918	693	420
	8 mos.	1,793	59,996	34,399	106,191	103,463	16,127	15,985	2,175	16,884	17,053	2,984	1,552	45,506	85,784	84,839	80.8	82.0	20,406	8,168	5,616	4,198
New York Connecting	Aug.	21	260	....	284	265	116	124	25	22	18	....	....	....	79	220	206	77.5	77.8	64	82	10	9
	8 mos.	21	2,406	....	2,618	2,219	714	789	201	217	133	....	....	....	667	1,622	1,478	61.9	66.6	996	659	447	398
New York, Ontario & Western	Aug.	541	567	21	609	624	138	144	25	80	91	23	24	281	555	600	91.1	96.2	54	40	—57	—75
	8 mos.	541	4,361	57	4,585	4,890	964	935	185	659	702	183	204	2,105	4,179	4,398	91.2	89.9	406	292	—384	—344
New York, Susquehanna & Western	Aug.	120	387	33	439	443	60	60	5	54	56	11	7	206	353	345	80.4	77.9	86	31	14	41
	8 mos.	120	3,112	301	3,582	3,661	457	439	44	472	427	90	68	1,602	2,813	2,679	78.5	73.2	769	251	232	392
Norfolk & Western	Aug.	2,135	15,504	545	16,694	18,617	2,389	2,240	330	3,143	3,227	591	286	4,627	11,092	11,612	66.4	62.4	5,602	3,741	2,792	2,980
	8 mos.	2,135	119,436	3,730	129,706	131,928	18,667	18,200	2,386	28,831	26,942	4,702	2,374	38,654	93,504	91,860	72.1	69.6	36,202	25,328	17,391	18,772
Norfolk Southern	Aug.	643	915	....	929	991	185	195	13	112	128	24	47	310	731	778	78.7	78.4	197	74	78	61
	8 mos.	643	7,586	....	7,706	7,540	1,574	1,389	105	946	917	187	381	2,416	5,917	5,689	76.8	75.4	1,789	818	617	566
Northern Pacific	Aug.	6,881	14,622	728	16,595	16,188	3,037	2,813	258	2,807	3,046	412	292	5,989	12,867	12,626	77.5	78.0	3,728	2,325	1,581	1,442
	8 mos.	6,884	98,106	4,939	112,021	109,521	20,313	18,028	2,357	22,733	22,186	3,241	2,417	44,011	95,047	90,472	84.9	82.6	16,973	12,092	7,226	8,257
Northwestern Pacific	Aug.	331	1,279	6	1,325	1,164	257	248	23	92	110	4	6	476	849	851	64.1	73.1	475	238	120	72
	8 mos.	331	8,491	57	8,814	7,614	2,084	1,828	145	838	849	33	43	3,354	6,452	6,183	73.2	81.2	2,362	1,058	389	194
Oklahoma City-Ada-Atoka	Aug.	132	97	....	98	111	21	24	4	3	3	....	2	22	51	55	51.7	49.7	47	23	15	25
	8 mos.	132	768	....	774	781	186	178	21	35	34	....	14	182	451	429	58.2	55.0	324	146	94	113
Pennsylvania	Aug.	10,120	66,292	12,907	87,717	90,928	8,800	12,140	1,366	17,047	20,538	3,214	1,261	36,052	66,277	75,042	75.6	82.5	21,441	9,991	9,846	5,727
	8 mos.	10,120	487,003	106,526	659,983	680,146	83,985	85,428	10,978	144,611	169,087	21,375	10,468	291,954	557,801	588,259	84.5	86.5	102,182	45,777	45,315	34,333
Pennsylvania-Reading Seashore Lines	Aug.	364	598	438	1,071	1,226	203	225	25	112	109	15	13	698	1,064	1,111	99.3	90.6	8	132	—273	—155
	8 mos.	364	4,756	1,689	6,690	7,090	1,692	1,774	203	786	769	123	88	4,626	7,481	7,762	111.8	109.5	—792	939	—2,755	—2,582

REVENUES AND EXPENSES OF RAILWAYS

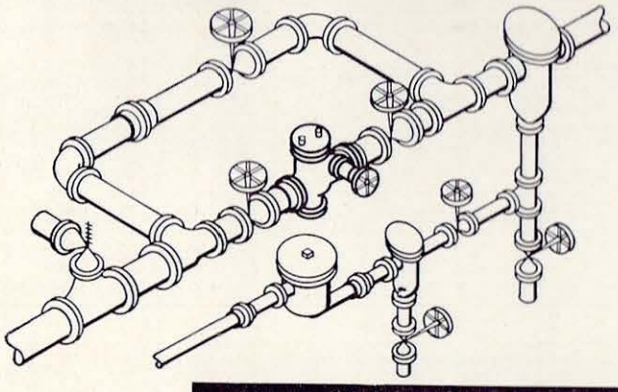
(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1952

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1952	Total (inc. misc.) 1951	Operating Expenses: Maint. Way and Structures: Total 1952	Total 1951	Deprec. and Retire-ments	Maint. Equipment: Total 1952	Total 1951	Depre. and Retire-ments	Traffic	Trans-portation	Total 1952	Total 1951	Operating ratio 1952	Operating ratio 1951	Net from railway operation	Railway tax accruals	Net railway operating income 1952	Net railway operating income 1951
Pittsburg & Shawmut	Aug.	97	200	....	200	195	41	49	4	47	50	9	3	50	150	167	74.7	86.1	51	10	70	34
	8 mos.	97	1,436	....	1,443	1,592	265	254	42	420	405	71	28	395	1,185	1,193	82.1	75.0	259	49	426	336
Pittsburgh & West Virginia	Aug.	132	836	....	851	736	147	160	24	169	199	36	50	195	588	630	69.1	85.6	263	131	146	82
	8 mos.	132	5,345	....	5,423	5,776	890	1,143	188	1,358	1,411	277	408	1,452	4,318	4,759	79.6	82.4	1,105	617	792	810
Reading	Aug.	1,320	9,852	550	11,021	10,860	1,805	1,814	401	2,184	2,317	423	143	3,947	8,463	8,963	76.8	82.5	2,558	1,270	1,484	1,016
	8 mos.	1,321	74,373	4,570	84,299	84,810	12,544	13,109	1,828	16,862	17,740	3,197	1,199	32,952	66,673	68,922	79.1	81.3	17,626	9,302	9,370	8,099
Richmond, Fredericksburg & Potomac	Aug.	118	1,340	590	2,217	2,222	369	294	24	308	342	65	23	658	1,486	1,579	67.0	71.1	731	413	240	177
	8 mos.	118	12,178	5,048	19,665	18,458	2,746	2,316	190	2,426	2,279	519	168	5,758	12,246	11,813	62.3	64.0	7,420	4,086	2,414	2,195
Rutland	Aug.	397	371	24	467	560	78	80	10	70	79	13	18	236	426	484	91.2	86.3	41	30	—5	27
	8 mos.	397	2,961	158	3,713	3,934	649	671	77	648	657	114	156	1,841	3,496	3,663	94.2	93.1	217	232	—148	—135
Sacramento Northern	Aug.	264	253	....	277	302	56	45	4	14	22	4	2	97	178	179	64.2	59.2	99	16	60	104
	8 mos.	264	1,653	....	1,715	2,157	513	439	78	118	229	32	18	692	1,415	1,502	82.5	69.7	300	119	27	372
St. Louis-San Francisco	Aug.	4,601	9,373	578	10,823	10,742	1,619	1,882	175	1,729	1,800	472	291	3,793	7,899	8,579	73.0	79.9	2,924	1,421	1,548	935
	8 mos.	4,601	70,542	4,765	81,963	80,595	13,389	13,726	1,439	13,878	13,881	3,834	2,353	30,152	63,676	64,616	77.7	80.2	18,288	8,838	9,424	7,159
St. Louis, San Francisco & Texas	Aug.	159	451	9	486	470	45	52	3	38	37	1	22	163	279	275	57.4	58.4	207	101	42	44
	8 mos.	159	3,430	57	3,708	3,249	398	393	47	297	293	8	162	1,238	2,190	2,164	59.1	66.6	1,517	616	648	245
St. Louis Southwestern Lines	Aug.	1,569	5,339	48	5,626	5,786	735	749	73	641	654	99	168	1,651	3,370	3,589	59.9	62.0	2,256	891	1,151	856
	8 mos.	1,569	45,355	305	47,577	46,205	5,916	5,829	506	5,132	5,579	766	1,316	13,322	27,195	28,783	57.2	62.3	20,383	10,644	7,912	6,087
Seaboard Air Line	Aug.	4,146	9,835	1,138	11,813	11,623	1,545	1,749	166	2,183	1,827	626	362	3,844	8,438	8,297	71.4	71.4	3,375	1,635	1,771	1,580
	8 mos.	4,146	90,289	11,262	109,544	101,268	16,294	16,588	1,381	19,196	17,263	4,598	2,938	35,168	78,047	75,238	71.3	74.3	31,496	14,380	15,282	11,468
Southern	Aug.	6,306	19,394	1,988	23,014	21,767	2,791	3,215	273	3,640	4,280	767	423	7,345	15,113	16,533	65.7	76.0	7,901	4,549	3,282	2,167
	8 mos.	6,306	148,976	14,414	176,850	170,278	23,457	24,001	2,059	33,030	33,551	6,037	3,489	59,283	126,538	128,475	71.6	75.5	50,312	27,344	20,893	16,926
Alabama Great Southern	Aug.	326	1,388	114	1,632	1,581	226	253	17	333	405	81	32	481	1,137	1,315	69.7	83.2	495	300	169	86
	8 mos.	326	10,964	794	12,814	12,831	1,902	1,894	151	3,011	3,213	648	271	4,141	9,840	10,435	76.8	81.3	2,974	1,976	998	886
Cinn., New Orleans & Texas Pacific	Aug.	337	3,326	225	3,731	3,763	482	489	48	823	881	184	71	997	2,494	2,510	66.8	66.7	1,238	789	558	556
	8 mos.	337	26,313	1,774	29,674	29,495	3,676	3,677	298	6,850	6,451	1,423	571	7,893	20,028	19,616	67.5	66.5	9,646	6,314	4,086	4,220
Georgia Southern & Florida	Aug.	397	617	74	754	703	161	158	7	62	70	8	8	211	457	465	60.6	66.2	297	111	86	61
	8 mos.	397	4,829	775	6,147	5,597	1,294	1,293	60	554	544	76	63	1,856	3,931	3,837	64.0	68.5	2,216	705	557	409
New Orleans & Northeastern	Aug.	203	864	69	994	1,086	181	153	16	122	133	27	18	227	593	596	59.7	54.9	400	265	124	151
	8 mos.	203	6,838	486	7,833	8,693	1,235	1,277	119	1,008	1,038	218	151	1,862	4,621	4,847	59.0	55.8	3,212	2,116	1,003	1,244
Southern Pacific	Aug.	8,113	39,662	3,815	47,125	45,424	5,169	5,136	448	9,623	9,307	1,565	819	18,461	36,178	35,239	76.8	77.6	10,947	5,267	4,023	3,563
	8 mos.	8,120	303,749	31,074	360,493	336,439	42,057	38,387	4,238	73,040	67,886	12,306	6,578	135,646	273,617	258,780	75.9	76.9	86,875	43,093	35,942	26,353
Texas & New Orleans	Aug.	4,291	10,125	750	11,664	11,460	1,707	1,772	129	1,583	1,994	87	244	4,523	8,593	9,232	73.7	80.6	3,071	1,268	855	552
	8 mos.	4,291	84,203	5,950	96,662	90,524	14,882	14,638	1,006	13,881	15,051	701	2,054	34,402	69,692	71,354	72.1	78.8	26,971	11,766	8,232	5,870
Spokane International	Aug.	152	286	1	302	251	68	52	2	23	24	7	5	71	180	157	59.4	62.5	123	41	60	37
	8 mos.	152	1,801	9	1,907	1,725	497	439	18	171	157	65	40	529	1,324	1,172	69.4	67.9	583	143	322	243
Spokane, Portland & Seattle	Aug.	944	2,787	111	3,077	3,101	465	448	45	334	305	94	26	821	1,735	1,784	56.4	57.5	1,342	435	809	505
	8 mos.	938	18,376	791	20,383	20,246	3,330	3,190	477	2,632	2,437	734	219	6,257	13,159	12,578	64.6	62.1	7,223	2,579	3,932	3,912
Tennessee Central	Aug.	286	406	6	439	474	81	102	5	57	66	20	12	139	310	351	70.7	74.1	128	26	64	57
	8 mos.	286	3,155	27	3,375	3,386	780	719	42	526	550	155	94	1,126	2,700	2,675	80.0	79.0	675	205	216	249
Texas & Northern	Aug.	8	96	....	106	146	5	6	....	9	13	2	1	25	46	48	42.9	32.5	61	32	17	31
	8 mos.	8	771	....	858	940	44	122	1	71	91	19	8	190	352	493	41.0	52.4	506	253	155	132
Texas & Pacific	Aug.	1,834	5,604	440	6,635	6,623	894	889	89	1,305	966	244	175	2,147	4,951	4,635	74.6	70.0	1,684	409	954	884
	8 mos.	1,834	46,261	3,227	53,990	50,914	7,690	6,993	859	9,204	7,785	2,009	1,433	17,144	38,166	35,775	70.7	70.3	15,824	6,244	7,267	5,922
Texas Mexican	Aug.	162	240	....	258	312	62	84	5	38	58	8	10	59	187	227	72.2	72.8	72	30	15	30
	8 mos.	162	2,195	....	2,338	2,238	555	540	50	263	282	66	68	480	1,523	1,536	65.1	68.6	816	356	280	260
Toledo, Peoria & Western	Aug.	239	509	....	516	531	112	101	6	29	32	10	43	127	344	345	66.6	65.0	173	71	46	88
	8 mos.	239	4,354	....	4,420	4,488	784	798	49	375	320	74	350	1,018	2,802	2,815	63.4	62.7	1,618	739	537	526
Union Pacific	Aug.	9,843	39,877	3,893	47,336	45,878	6,238	5,867	578	7,911	8,194	1,183	773	16,512	33,727	34,014	71.3	74.1	13,609	7,834	3,589	2,965
	8 mos.	9,855	269,661	27,566	323,864	323,474	50,128	46,225	4,247	60,320	61,752	9,347	7,405	117,396	253,082	249,226	78.1	77.0	70,782	46,673	13,926	15,747
Utah	Aug.	110	105	....	105	143	21	18	3	39	47	7	1	44	113	128	107.6	89.3	—8	7	4	19
	8 mos.	110	916	....	919	726	176	138	17	380	370	52	7	456	1,079	926	117.4	127.6	—160	84	—148	—184
Virginian	Aug.	611	3,054	3	3,175	4,528	444	516	58	784	939	172	43	790	2,146	2,526	67.6	55.8	1,028	685	580	800
	8 mos.	611	28,926	16	30,086	29,853	3,919	3,517	466	7,067	6,550	1,378	364	7,037	19,143	17,644	63.6	59.1	10,943	6,568	5,539	5,642
Wabash	Aug.	2,393	7,934	507	9,148	8,747	1,340	1,394	166	1,249	1,179	344	289	3,847	7,093	7,079	77.5	80.9	2,056	710	818	438
	8 mos.	2,393	64,566	3,434	73,675	72,432	9,990	10,725	1,045	10,219	9,661	2,719	2,298	30,511	55,929	55,765	75.9	77.0	17,746	7,386	6,945	5,106
Ann Arbor	Aug.	294	317	....	325	907	71	119	17	96	106	30	21	101	303	623	93.4	68.6	22	Cr. 5	33	119
	8 mos.	294	5,029	....	5,102	6,286	848	777	134	921	857	240	203	2,150	4,270	4,579	83.7	72.9	833	325	413	667
Western Maryland	Aug.	836	3,643	11	3,835	4,035	393	549	68	657	825	173	113	1,197	2,593	2,891	67.6	71.6	1,242	768	798	659
	8 mos.	836	28,681	76	30,408	31,685	3,568	4,344	378	6,491	6,319	1,387	694	9,843	22,076	22,553	72.6	71.2	8,331	4,921	5,150	5,335
Western Pacific	Aug.	1,193	4,677	317	5,122	4,666	913	646	186	644	707	117	192	1,671	3,652	3,147	71.3	67.4	1,470	706	507	597
	8 mos.	1,193	31,278	2,218	34,351	35,489	5,998	4,928	666	5,204	5,281	898	1,452	10,755	25,273	23,824	73.6	67.1	9,077	4,654	3,700	4,779
Wisconsin Central	Aug.	1,046	2,662	58	2,894	2,814	385	456	35	365	467	65	63	1,098	2,015	2,263	69.6	80.4	879	147	587	383
	8 mos.	1,046	18,449	376	20,018	20,341	3,032	2,899	299	3,507	3,746	518	561	8,487	16,425	16,605	82.0	81.6	3,593	1,195	1,287	1,260

Can Your Pressure Regulators Match This Service Record?

...on a Steam Kettle for instance



THE INSTALLATION

On steam supply line to cooking kettle, Schoenling Brewing Company, Cincinnati.

THE HISTORY

Specifications for this installation called for a regulator to reduce main line steam supply at 100 psi to 30 psi, and automatically maintain the reduced pressure to cooker, 24 hours daily, without significant fluctuation.

A Crane Pressure Regulator with factory pre-set range was selected and properly installed with adequate, automatic drainage of the steam lines.

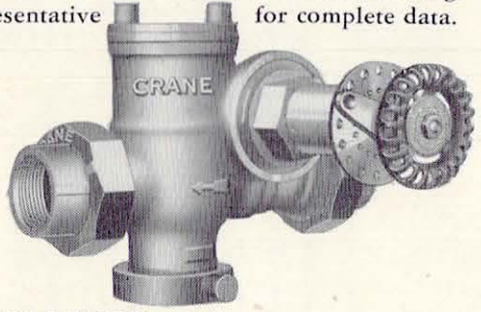
For 16 years, throughout its lifetime, the Crane Pressure Regulator did its job to the brewery's complete satisfaction. Never was it out of service; never did it require more than the simple prescribed periodic inspection. (Note: current model has renewable wearing parts; will virtually never wear out.)

VALVE SERVICE RATINGS

SERVICE LIFE:	16 years - 24 hours per day
MAINTENANCE COST:	None - simple servicing only
SPECIAL FEATURES:	Good pressure range - easy adjustment
SUITABILITY:	Steady flow - no pressure build-up
OPERATING RESULTS:	Accurate control of cooking process
PRICE:	Low - considering service life
AVAILABILITY:	Stock item - Crane line

THE VALVE

Crane No. 960 Brass Pressure Regulators are made for reducing steam or air pressure up to 250 pounds, to within 80% of inlet pressure. They are factory pre-set to operate within any of 4 ranges from 1 to 200 pounds, with easily selected outlet pressure within set range. Precision made, they are fully automatic, highly dependable, even under reasonable fluctuation of inlet pressure. All wearing parts renewable. See your Crane Catalog or Crane Representative for complete data.



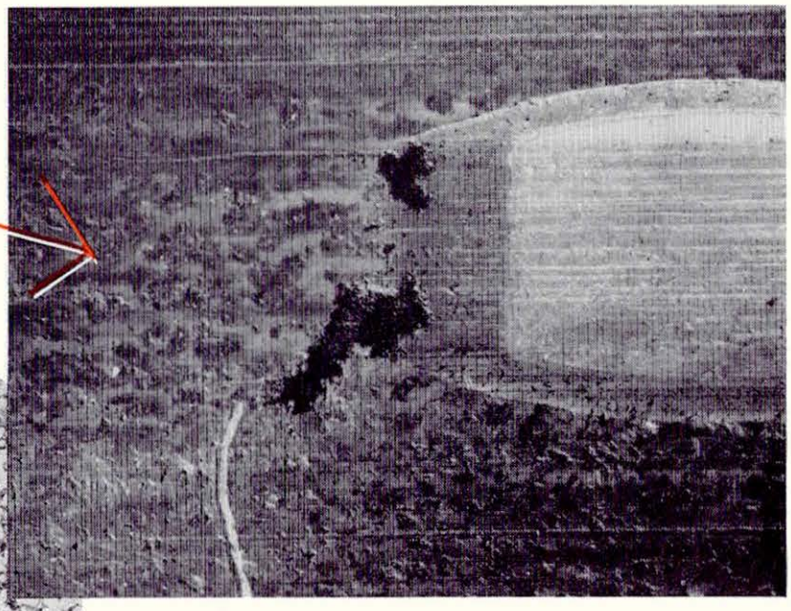
The Complete Crane Line Meets All Valve Needs. That's Why
More Crane Valves Are Used Than Any Other Make!

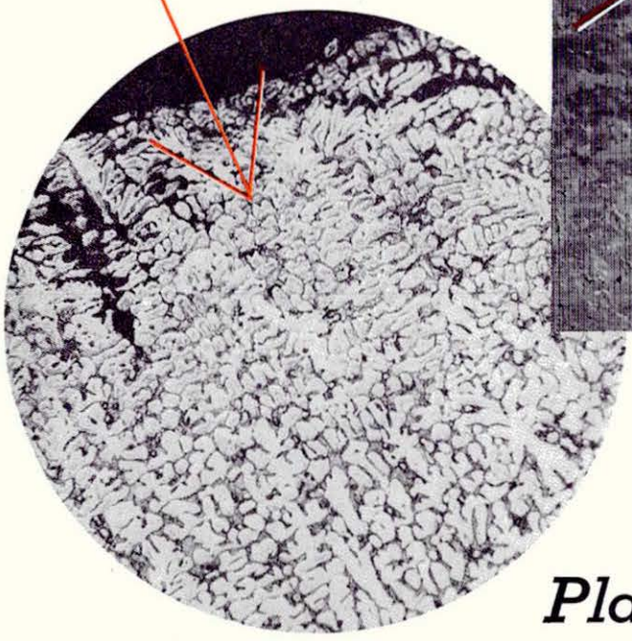
CRANE VALVES

CRANE CO., *General Offices:* 836 S. Michigan Ave., Chicago 5, Illinois
Branches and Wholesalers Serving All Industrial Areas

VALVES • FITTINGS • PIPE • PLUMBING • HEATING

Don't let this happen to your Diesel bearings!





(Above) Photograph of surface of corroded copper-lead Diesel engine bearing. (Left) Photomicrograph of section through same bearing, showing loss of lead on the bearing surface after attack by corrosive elements. Note how the copper (white areas) is beginning to crumble. Lead is shown in gray.

Play safe with

GULF DIESELMOTIVE OIL

-it's noncorrosive to copper-lead and silver bearings

In millions of miles of service, Gulf Dieselmotive Oil has proved to be noncorrosive to both copper-lead and silver bearings. There are several good reasons for this kind of performance: first, Gulf Dieselmotive Oil is made from a high quality base stock; second, it's 100% solvent refined; and third, it contains the right combination and concentration of additives. As a result, this quality lubricant is not corrosive, even after long periods of service.

If you want to avoid troubles like that pictured above, switch to Gulf Dieselmotive Oil. For further information, write, wire, or phone your nearest Gulf office.

GULF OIL CORPORATION
GULF REFINING COMPANY
PITTSBURGH 30, PA.

GULF

ARE *YOU* NUMBERED HERE AMONG RAILWAY AGE'S 14,813 *PAID* SUBSCRIBERS?

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(a) Executive Department - Chairmen of boards, presidents, assistants to presidents, corporate vice-presidents, secretaries, treasurers, auditors, assistants & other departmental employes	1,378
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(c) Traffic Department-Vice Presidents, freight traffic managers, passenger traffic managers, general freight & passenger agents, & other departmental employes	1,607
(d) Purchasing Department -Vice-Presidents, general purchasing agents, purchasing agents, assistants & other departmental employes	237
(e) Mechanical Department - Vice Presidents, general superintendents of motive power, mechanical engineers, master mechanics, shop superintendents, & other departmental employes	1,312
(f) Engineering Department - Vice-Presidents, chief engineers, engineers maintenance of way, engineers bridge & building, division engineers & other departmental employes	1,247
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TOTAL	14,813

June 30, 1952 ABC Statement

VERY IMPORTANT PEOPLE

—*you Railway Age subscribers!*

The ABC symbol displayed on this page stands for "Audit Bureau of Circulations," a cooperative association of advertisers, advertising agencies and publishers for the verification of circulation.

Once a year ABC's auditors give us—and any interested person—a detailed, accurate, verified account of everyone who pays to receive *Railway Age:* who and where they are . . . how many they add up to . . . what their titles, their work and, consequently, their job interests are . . . and many more facts that check and double check the *exact number* and the *exact kind* of subscribers we are reaching.

Editorially, our main objective is to help *you* do your job quicker, more efficiently, and at a greater profit. With the ABC audit verifying regularly and authoritatively just who, what and where you are, we have impartial confirmation of the soundest formula for selecting and publishing the kind of articles and features in which you have a marked on-the-job interest. Guided by the ABC audit, *Railway Age's* editors work *expressly for you.*

The same detailed check which guides our editors in being of greater service to you also helps our advertisers. They, like the editors, take the ABC audit seriously. Knowing the facts help them to tell you how to do a job faster, better and, again, at a greater profit. That's why the ads in *Railway Age* constitute such a valuable supplement to the editorial content.

Yes, in both our editorial and advertising pages, you're in the driver's seat—very important people!

In addition to the ABC audit, the fact that you *pay* for our publication helps to keep us on our toes. Because you respect *Railway Age* enough to pay for it, we, in turn, must produce a business paper that continually *earns* that respect. *The fact that in the past two years,* as verified by ABC, *we have increased our circulation among railroad men by 100%, shows that our efforts are successful!*

If by any chance, you're not numbered among those in the totals at the left . . . if perchance you're reading someone else's copy of *Railway Age*—why not become a full-fledged *Railway Age* subscriber *today!* Let this service work for you regularly every week!

ABP-ABC RAILWAY AGE

30 Church Street, New York 7, New York

Scullin Salutes

Another great railroad . . .
with whose honored name
we have been proud to have ours coupled
as suppliers of Fine Steel Castings
throughout half its century of planned progress . . .

Rock Island

A CENTURY OF SERVICE
1852 · The Road of Planned Progress · 1952

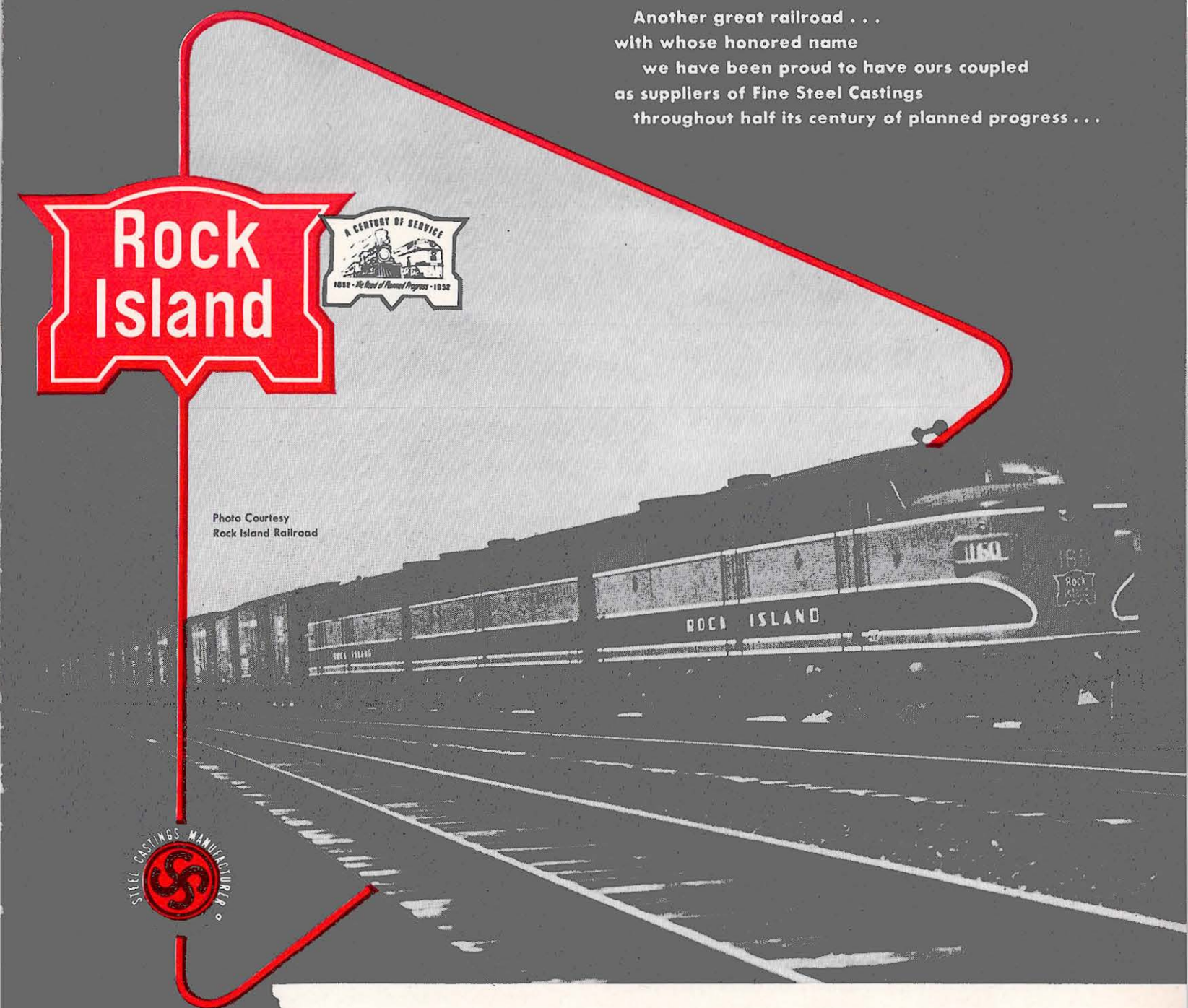

Photo Courtesy
Rock Island Railroad

STEEL CASTINGS MANUFACTURER

NEW YORK
CHICAGO
BALTIMORE
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SCULLIN STEEL CO.

SAINT LOUIS 10, MISSOURI

Now . . . 2 New
AO COVERGLAS GOGGLES
Fit Over Safety And Personal Glasses

NEW
Safety Goggles

#326

#327

NEW — 4 WAYS!

1. New Cup Size and Shape
2. New Lens Size and Shape
3. New Side Shields
4. New Easy Lens Replacement

AO's newest development in eye protection—Chippers' and Welders' Coverglas Goggles—can be worn over practically every pair of personal glasses (even the biggest frames) and most types of safety prescription goggles *with and without side shield.*

Wider vision, too, because the lenses are larger and scientifically designed to give up to 20% more vision. Yet, with all these features the goggles weigh but a fraction of an ounce more than ordinary Coverglas goggles . . . cost only slightly more.

These goggles are the newest . . . and two of the greatest . . . developments since the advent of safety goggles. Get all the facts about these two outstanding Coverglas goggles from your AO Safety Products Representative. He can supply you.

QUICK FACTS

- Lens easily replaceable from rear (not front) by means of a spring clamp—no tools needed
- Lightweight, brown plastic cups fit face snugly, won't conduct heat or electricity
- Light-tight side shields for welders (on No. 327 goggle) provide indirect ventilation
- Bridge—High-grade leather. Instant adjustment
- AO worker-lab tests show much greater field of vision and increased comfort
- All-rubber headband, easily adjustable

"326" Chippers' Coverglas goggle supplied with regular Super Armorplate lenses. "327" Welders' Coverglas goggle supplied with regular Noviweld lenses and cover lenses.

AO's Industrial Vision Program Increases Production, Decreases Accidents. Write today for booklet "Improved Industrial Vision" to 1011 Vision Park, Southbridge, Mass.

American Optical
COMPANY
SAFETY PRODUCTS DIVISION

SOUTHBRIDGE, MASSACHUSETTS • BRANCHES IN PRINCIPAL CITIES

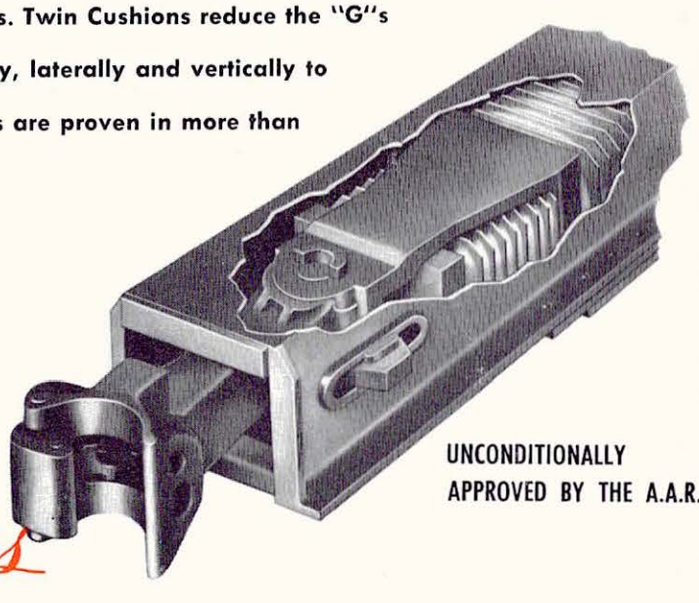
WAUGH MEN ARE 'G'* MEN

* "G", the unit of change in velocity which is equal to the pull of gravity or 32.2 feet per second per second.

Specifically, Waugh men are specialists in "G" control . . . in reducing the accelerations or decelerations between passenger cars, head-end cars, cabooses and freight cars and locomotives of all types. • For more than twenty years, Waugh engineers have developed and tested rubber car cushioning to provide a superior type of "G" control. The result is Waughmat Twin Cushions, the time proven and unconditionally A. A. R. approved car cushioning device. • Excessive "G"s [accelerations or decelerations] and violent changes in accelerations contribute to hot boxes, car damage, lading damage and rough riding cabooses and passenger cars. Twin Cushions reduce the "G"s of impact and the rates of change in acceleration longitudinally, laterally and vertically to provide extraordinary car and lading protection. Twin Cushions are proven in more than 20 years service experience on American railroads.

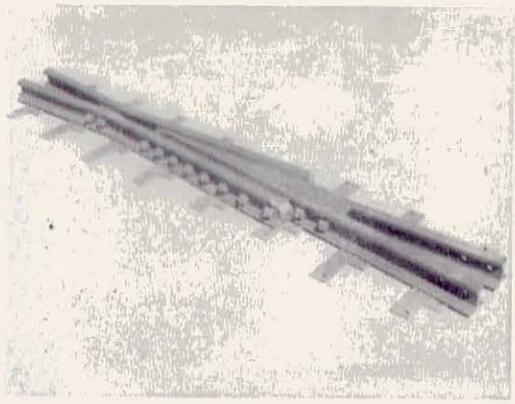
To take the bite out of impact . . .
for 'G' control . . . Specify

WAUGHMAT *Twin Cushions*



UNCONDITIONALLY APPROVED BY THE A.A.R.

WAUGH EQUIPMENT COMPANY, New York · Chicago · St. Louis · Canadian Waugh Equipment Company: Montreal



FROGS
CROSSINGS—SWITCHES

Your Railroad Track Material requirements tailor-made exactly to specifications. NELSON IRON WORKS, backed by years of know-how in this highly specialized business, is a recognized leader in the field.

NELSON
IRON WORKS, INC.

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FOR SALE

7 Streamlined All Steel Dining Cars

Built 1937 — Cars Now in Regular Service

Air Conditioned — Steam Jet Type

4 Wheel Cast Steel Roller Bearing Trucks

Seating Capacity — 48.

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30 Church St., New York 7, N. Y.

YOCAR
ESTAB. 1914

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NILES, OHIO

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•

RAILROAD EQUIPMENT
CARS—LOCOMOTIVES
REPAIR PARTS

RELAYING RAILS

STEEL STORAGE TANKS
6000—8000—10000 gal. cap.
CLEANED AND TESTED

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8754 S. Dobson Avenue Chicago 19, Illinois

HYMAN-MICHAELS COMPANY

Relaying Rails ★★★ **Dismantling**

Used railroad equipment—cars—locomotives
Freight Car Replacement Parts

Complete stocks of guaranteed used freight car parts carried on hand by us at all times. Located conveniently for shipment to any part of the country. Write—Phone—Car or Track Dismantling, or Car Parts.

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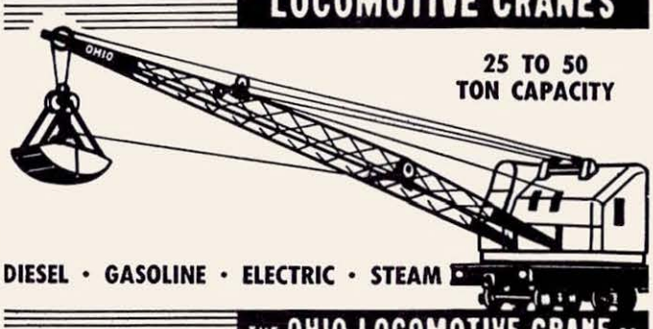
Wire—when interested in used Rails, Equipment, Cars,

St. Louis	Los Angeles	Havana, Cuba
New York	San Francisco	Houston
SERVICE	QUALITY	RELIABILITY

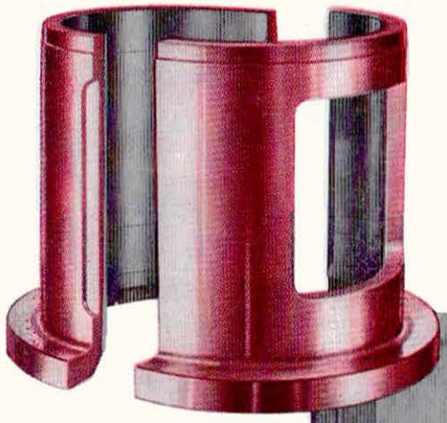
OHIO
LOCOMOTIVE CRANES

25 TO 50
TON CAPACITY

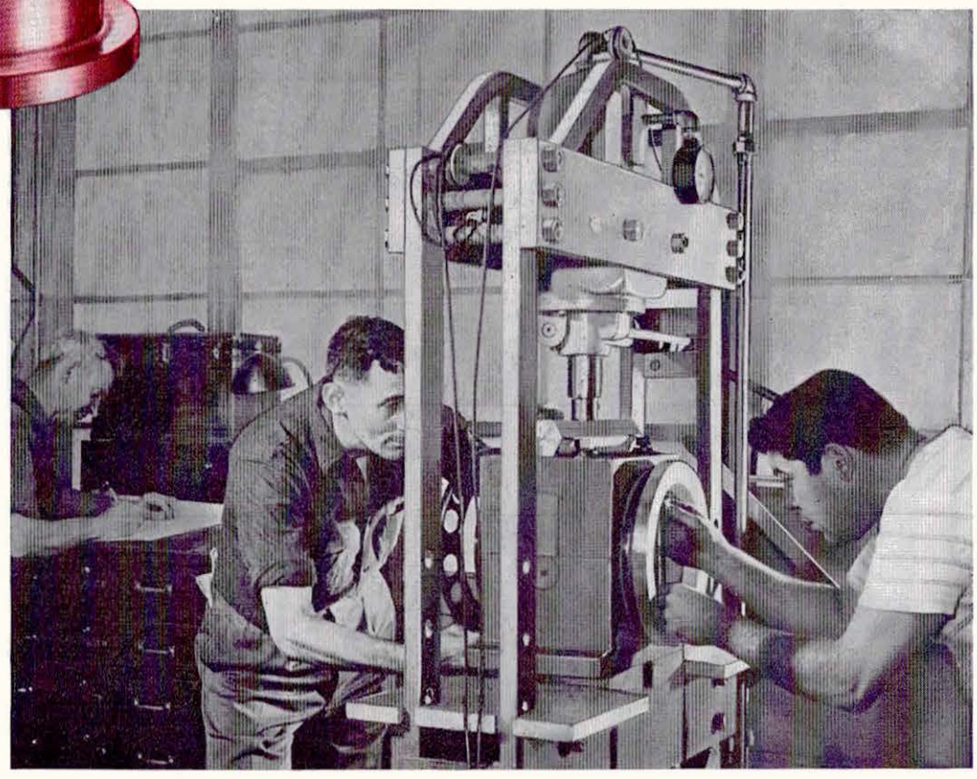


DIESEL • GASOLINE • ELECTRIC • STEAM

THE OHIO LOCOMOTIVE CRANE CO.
BUCYRUS, OHIO



Here's how MAGNUS builds EXTRA MILEAGE into Traction Motor Support Bearings



● **FINAL MICROMETER TESTING** under load means perfectly mated bearing halves—your assurance of better performance on the road with Magnus High Mileage bearings.

Putting cost-saving extra miles into precision bearings is a real art with Magnus. It means a lot of extra care in manufacture that really pays off in performance: Magnus Traction Motor Support Bearings are setting mileage records in Diesel locomotives the country over.

Here are just a few highlights of Magnus HIGH MILEAGE bearing production:

- **SATCO LINING METAL** gives greater resistance to wear and load — stronger bonds — increased hardness at high temperatures.
- **IMPROVED FLANGE FILLET PROFILE** prevents "riding" the fillet and "feathering" of the lining metal.
- **HI-STRENGTH BRASS BACKS,** made from high-tin, fine-grained wearing metal mixes that are *Magnus-guaranteed.*
- **COMMUTATOR-PINION END INTERCHANGEABILITY** — a Magnus-pioneered improvement that simplifies maintenance and saves in bearing stockpiling.

Magnus HIGH MILEAGE Traction Motor Support Bearings are available for replacement on every type and make of diesel-electric and electric locomotives, and "MU" cars. For complete information, send for your free copy of Bulletin No. 6000. Just write a post card or letter to Magnus Metal Corporation, 111 Broadway, New York 6, N.Y.; or, 80 E. Jackson Boulevard, Chicago 4, Ill.

MAGNUS

High Mileage

TRACTION MOTOR SUPPORT BEARINGS

...for every type and make of diesel locomotive

MAGNUS METAL CORPORATION *Subsidiary of* **NATIONAL LEAD COMPANY**

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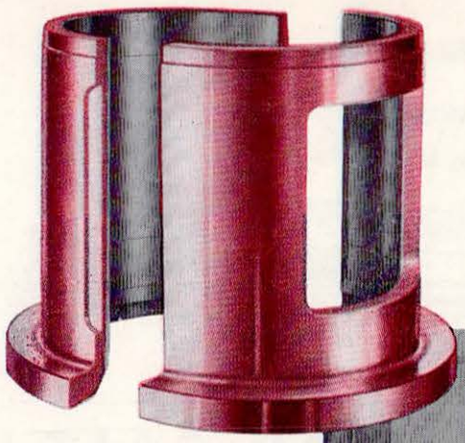
The House of Stainless

STEEL AT YOUR SERVICE

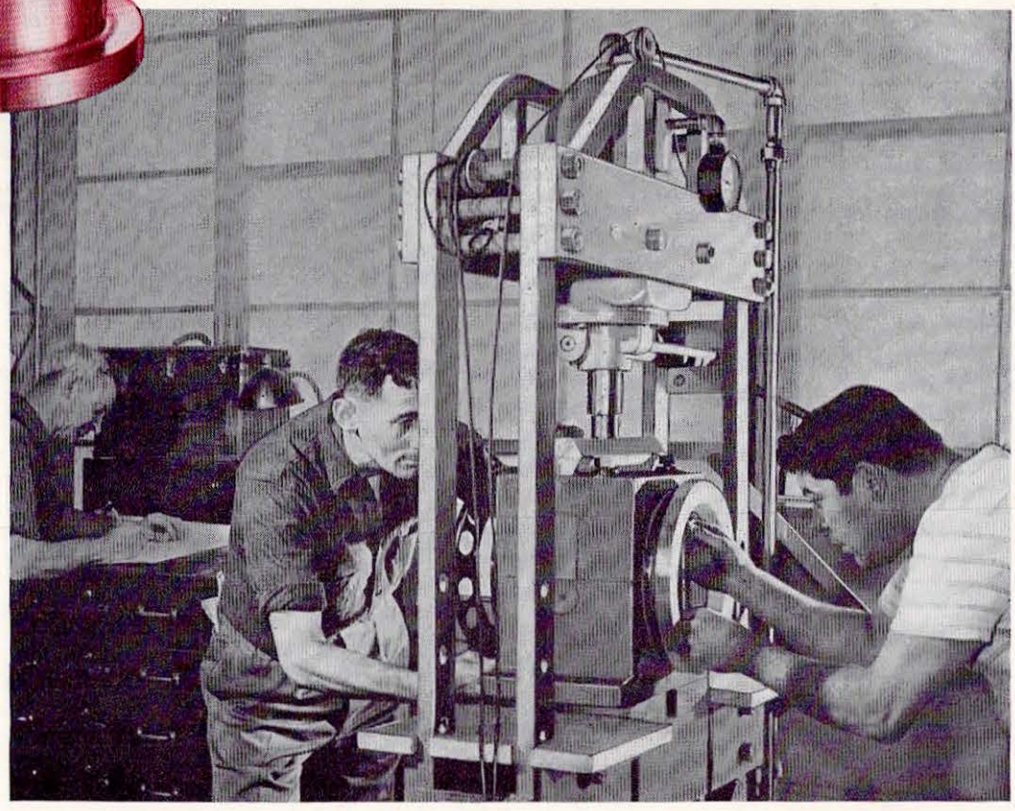
CHICAGO STEEL SERVICE COMPANY

Kildare Ave. at 45th St. Chicago 32, Ill. Telephone LAfayette 3-7210

COMPLETE SERVICE IN STAINLESS and CARBON STEELS



Here's how MAGNUS builds EXTRA MILEAGE into Traction Motor Support Bearings



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MAGNUS

High Mileage

TRACTION MOTOR SUPPORT BEARINGS

...for every type and make of diesel locomotive

MAGNUS METAL CORPORATION *Subsidiary of* **NATIONAL LEAD COMPANY**

Rates: $5.00 an inch (1" x 1⅝") per insertion; employment ads 10 cents a word, minimum $2.00. Add $1.00 for box address.

RAILROAD EQUIPMENT—*FOR SALE*

USED AS IS RECONDITIONED

STANDARD GAUGE FREIGHT CARS

Box—Double Sheathed, 50-Ton
Box, Single Sheathed, 50-Ton
Flats, 40- & 50-Ton, Steel Underframe, 40' 0"
Gondolas, Composite, 40-Ton Capacity
Gondolas, Composite or All-Steel, 50-Ton
Hoppers, Covered, All-Steel, 70-Ton
Hoppers, Twin, All-Steel, 50-Ton Cross Dump
Hoppers, All-Steel, 70-Ton, Cross Dump
Tank, 3,000-Gallon, High Pressure
Tank, 8,000-Gallon, Coiled and Non-Coiled

EXTRA LONG FLAT CARS

40- & 50-Ton Capacity, Length 70' and 74'

CABOOSE CARS

Eight Wheel, Cupola Type

STANDARD GAUGE AIR DUMP CARS

Side Dump, 20-Yd., 40-Ton, Lift Door
End Dump, 20-Yd., 50-Ton, Drop Door
End Dump, 10-Yd., 30-Ton, Lift Door

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Locomotive Cranes
Overhead Cranes
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STANDARD GAUGE DIESEL-ELECTRIC ROAD SWITCHING LOCOMOTIVE

1500-H.P., 120-Ton, Type 0-4-4-0

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Passenger Cars
Baggage Cars
4 All-Steel Dining Cars, Air-Conditioned

Send us your inquiries **We Buy Freight Cars for Dismantling** *Send us your offerings*

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STORAGE TANKS
6,000 Gallon
8,000 Gallon
10,000 Gallon

Educational Services for RAILROAD MEN

Our New Service on Diesel Locomotive Operation is highly recommended for Engineers and Firemen

The Railway Educational Bureau Omaha 2, Nebraska

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FOR SALE

65 ton General Electric 380 HP diesel electric locomotive. Rebuilt.

4 heavy duty steel flat cars, 70 ton capacity.

30 ton Industrial Brownhoist locomotive crane gasoline powered.

MISSISSIPPI VALLEY EQUIPMENT CO.
509 Locust St. St. Louis 1, Mo.

WANTED

Narrow gauge steam locomotive capable of being put in operating condition. State price, age, condition, gauge, location and include photograph and full particulars.

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FOR SALE

25—10,000 CLASS III TANK CARS.
30 TON IND. GAS LOCO. CRANE.
20 TON WHITCOMB GAS LOCOMOTIVE.
65 TON G.E. DIESEL ELEC. LOCOMOTIVE.
2—100 TON G.E. DIESEL ELEC. LOCOMOTIVES.
6—10,000 & 20,000 GAL. STEEL TANKS.
DARIEN, 60 E. 42nd St., N.Y. 17, N.Y.

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Chicago 3, Ill.

POSITION WANTED

POSITION WANTED

SALES POSITION WANTED WITH RAILWAY SUPPLY COMPANY.

Sales Engineer with Sales and Sales Service Experience in Car and Diesel Locomotive Specialty Fields. Substantial Record with Old Line Companies.

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Budgets Are Being Prepared Now For 1953

Keep your name, address and services in front of the responsible railroad men. Advertise in the

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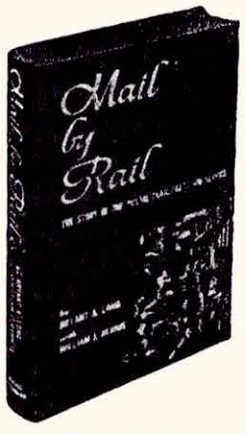
Railway Age
30 Church St., New York 7, N. Y.

PROFESSIONAL DIRECTORY

Robert W. Hunt Company
ENGINEERS
Inspection—Tests—Consultation
All Railway Equipment
Structures and Materials
General Office:
175 W. Jackson Boulevard
CHICAGO
New York-Pittsburgh-St. Louis

TAKES YOU INSIDE THE HEAD END'S "MYSTERY CAR"



MAIL BY RAIL tells you the little-known story of railroading in the mail cars . . . the lurching, colorful life of the railway mail clerk as he sorts your letters to intricate connections at mile-a-minute speeds!

You'll read of operations on the Santa Fe, the Pennsylvania and many others . . . even the old-time streetcar and interurban networks, as viewed from inside the Railway Post Office. You'll read of celebrated wrecks and robberies of famous mail trains, and a pack of the funniest railroad yarns you've ever laid your eyes on.

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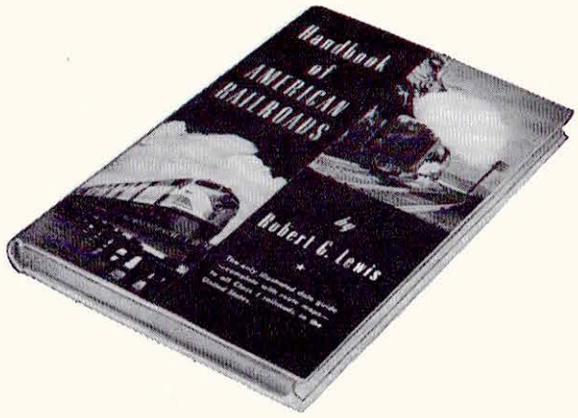

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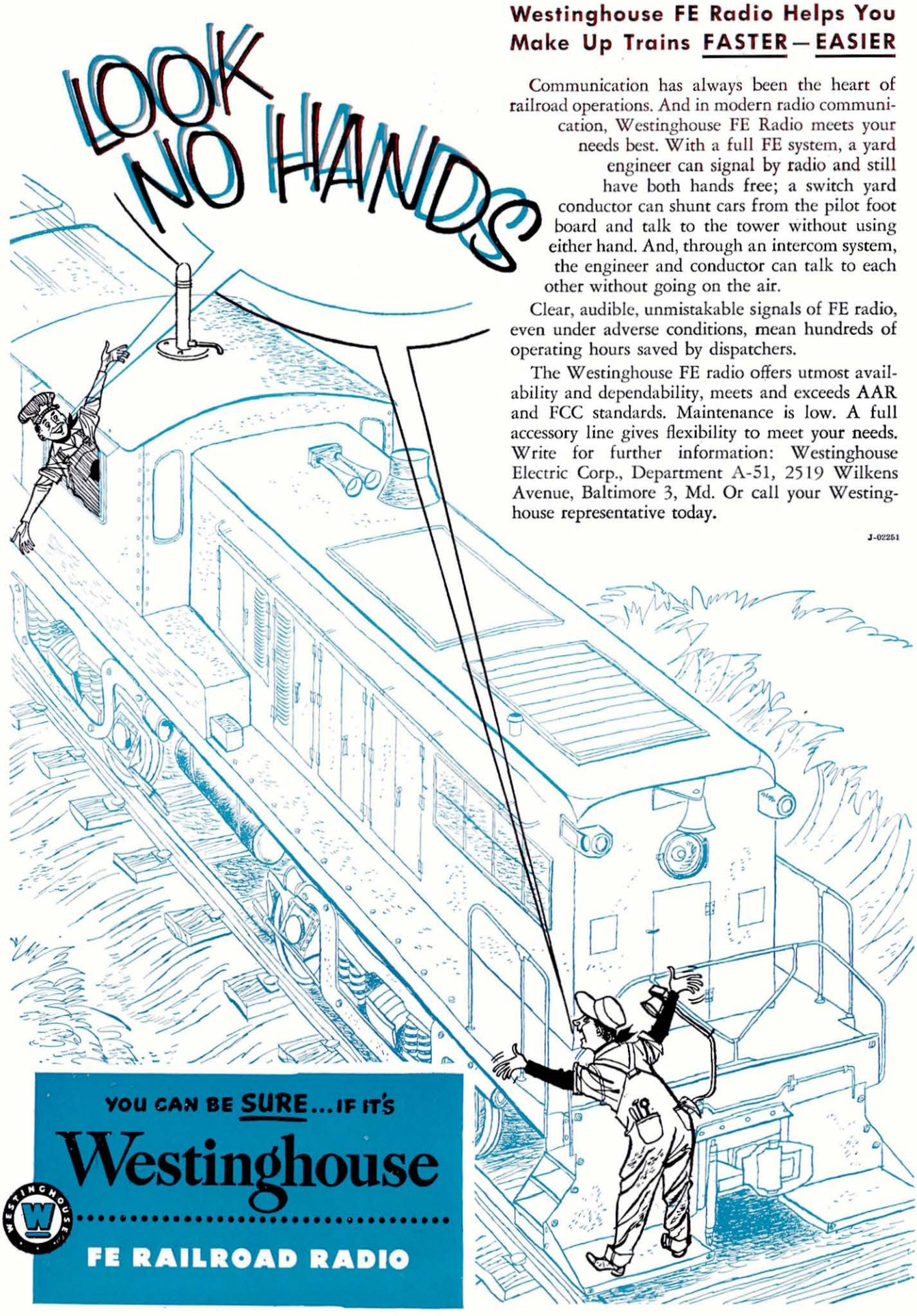

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